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Zink, R. M.

1978-81

Species acct.

R. M. Zink
1981

Goshawk (Accipiter gentilis)

Lake Itasca Park, Clearwater Co., Minn.

6 June

Observed an active nest in mature Red Pine area,
on Park Drive, across from Bus Station. The nest was
40 ft. up in notch of dead/dying conifer. See Journal
for more details

R. K. Zink
1979

Accipiter cooperi

Hearldsburg, Sonoma Co., California

31 March

Saw 1 probable bird over Hwy. 101 - some forest
near + some oak woodlots + pastures.

Mendocino National Forest 2 mi. S, 1 1/4 mi. E Pogos Pk., 960 m, Lake
Co., Calif. [T. 17N, R. 9W, SW 1/4 sec. 31]

1 April

Saw 1 bird twice between 0800 - 1000. Perched in
dead conifer + dying oak. Briefly soared over chapparal +
gave the local birds something to chatter about.

July
1983

Observed an imm. on campus.

R.M. Zink
1979

Swainson Hawk

1 mi. NE Wet Meadow, Mono Co., Calif.

12 July

Larry Comay and I sighted one bird as it
somed along the canyon leading (down) NE
from Wet Meadow. We had a pretty good look &
are fairly sure it was a dark phase immature.
Had streaks underneath, rather pointed wings,
wings held above horizontal, full dark
above & below, Tail finely barred.

R.M. Zink

1979

Golden Eagle

1 mi. W Woodward Peak, 6400 ft., Kern Co., Calif. T. 26S, R. 31E, Sec. 24

14 June

Larry Conroy + I observed 1 bird, prob. a 2 yr. old as it traversed the valley over an old burn. It was being harassed by a Red-tailed Hawk.

Tilden Regional Park, Alameda Co., Calif.

1 July

With Larry Conroy + Mallory Witt, observed 1 1-2 yr. old eagle as it soared over a Baccharis covered hillside.

Jxn. 580+680, Alameda Co., California

2 July

Larry Conroy + I sighted one from the car. The bird was circling over grassy hillsides.

Trail Canyon 9400 ft., Esmeralda Co., Nevada

6 July

Larry Conroy + I observed 1 ad. very high over canyon (est. elev. of bird 14,000) as it soared. It was being harassed by 2 Red-tails, which often seemed to make contact as they stopped on the eagle.

10 mi. S of Doyle, N end of Upper Long Canyon, Lassen Co., Calif.

22 July

Larry Conroy + I had excellent look at 1 ad. as it soared along sage + Pinon covered hills near Hwy 395.

2 mi. S, 2 mi. E Sugar Hill, Modoc Co., Calif.

25 July

Larry + I saw 1 imm. as it soared over sage covered hillsides.

R. M. Zink

Prairie Falcon

1979

South of Carson City, Nevada

22 July

Larry Combs & observed 1 bird as it flew just
wayside rest & perched on utility pole.

R. M. Zink
1979

Common Nighthawk

"Shaver Lake", 2 mi. S, 2 1/2 mi. W Bald Mtn. 5400 ft., Fresno Co., Calif.

25-28 June

Observed up to 5-6 in air at once, especially active at crepuscular periods. However, they were seen high overhead during day (clear + sunny) + were first noted by calls. On evening of 25 June, at dusk, had 2-3 birds essentially hovering about us, making 'typical' buzzes. It was almost as though we were near a nest or young, as the birds seemed very interested in our presence. Other birds (~~throughout~~^{during} evenings of 25-28) were making display dives, w/ associated buzzing noises at bottom of dive.

Adm. Zink
1979

Hairy Woodpecker

2 mi E Red Mtn., Kern Co, Calif.

13 June

Saw ♂ w/ food at presumed nest hole in snag in
elderberry brushland on old burn site.

R. M. Zink

1978

Empidonax

Sierra Nat. Forest, Madera, California, T. 65, R. 25E, sec. 31

2250m

Shot an incubating ♀ nest in a patch of 3' manzanita
* was near top of a 3' manzanita bush. Nest was fairly
exposed, had 2 plain, whitish eggs. Nest had a Jay or Western
Tanager feather in it. Bird was very skittish. I had to
approach nest several times to get bird.

R.M. Zink
1981

Empidonax alnorum

Lake Itasca area Hubbard Co., Minnesota (see RMZ catalogue for precise localities)

1-6 June

This has been a puzzling week. I have encountered what I think is this species regularly, in alder-willow thickets, usually w/ spruce/tamarack and wet, boggy conditions. They are often found by locating song, which male gives (often, not always) from an elevated, exposed (bare) perch. There has been variation in how dense + wet the conditions are (this is partially confounded because it's been dry here for a couple years). One bird (RMZ 1789) was collected in a willow-alder(?) wet area bordering a pasture. The bird was perched on a telephone line, calling, when I saw + heard it while driving by. When I approached it, it flew into the willows. This area had some standing water, but was essentially a wet (but presently mostly dry) open "boggy pasture", w/ some grass tussocks. It was surrounded by willow clumps (a photo taken on 8 June). Thus, this last site seemed drier + less bog-like than the site I collected the greatest # of flycatchers at. Again, I've found them in fairly open to dense alder (+some Salix) bogs, usually with some spruce or live trees utilized as song perches. Males do on occasion call/sing from low in dense vegetation. The Alnus/Salix gets to 3-4m in height, lots fallen rotten snags, small (m2) openings w/ water or mud.

Song. This has been most perplexing. E. alnorum is supposed to sing a fee-bee-o (Peterson). Almost all the birds I hear give either a wheezy or buzzy 2 syllabled song, or just a 1 note ascending, wheezy rendition (this is not the "pf" call note, but a part, I believe, of the

R. M. Zink
1981

Empidonax alnorum

1-6 June
(cont.)

Lake Itasca area, Hubbard Co. Minnesota (see RMZ catalogue)
regular song. The fact that the ~~song~~ song sounds 2 syllabled, rather than 3, could be a function of my inexperience with both spp. (i.e. E. alnorum + trochilus). It is also possible that the 3rd syllable is present but so close to 2nd that I can't hear it. Or, perhaps songs of alnorum from this area are different from typical fee-bee-o. The songs have a phoebe (Sayornis phoebe)-like quality.

Territory - The bog 2 mi. N, 1 mi. W of Lake Alice bog had 4+ singing ♂♂ (⁴ ~~all~~ were collected). I would estimate this as about 400m x 350m. The territories ranged from rather dense, tall alder + snags (+ wet) along road, to a open area w/ lots snags (fallen + standing) + alder ≤ 1.5 m (also lots dry grass?).

At Lake Alice Bog, there were 3 ♂♂ spread along the creek at intervals similar to the situation described above.

8 June

I had an opportunity to hear a singing ♂♂ in LaSalle Co. Bog this morning, while I took down nets. I'm now pretty sure that these E. alnorum do sing a 2 note song, a buzzy-wherry — 'see' (≤ .5 sec), with the accent on the (ascending) terminal portion. Birds which I've described in catalogue (+ above) as giving a one note song are giving the second portion of this song (i.e. 'see'). Perhaps sometimes there's a discernable 3rd syllable but I've not

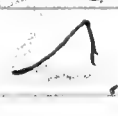
R.M. Zink
1981

Empidonax alnorum

Lake Itasca area, Hubbard Co., Minn. (see RMZ catalogue)

8 June
(cont.)

positively heard it. The frequency with which ♂♂ sing varies considerably; I didn't time them, but did estimate ~~about~~ songs given from few/minute to 20-30/min. The frequency seems to vary w/ state of bird. For example, a couple times birds sang at high rate when agitated (I assume) by my presence. I think ♂♂ can be induced to sing by "squeaking," "jittering" or imitating owls.

I revisited sites for photos. I heard again the shorter song (I described as "-bee"); it is a slightly less buzzy (partially ^{+ wheezy} whistler) . RMZ 1787, 88+89 ^{+ 1793} gave this call (song?), while 1790 ~~cat~~ gave the "fee-bee".

1 mi. S, 2 mi. W Ulen,

Clay Co., Minnesota

9 June

In a fairly large boggy alder/willow swamp I heard 4+ ♂ Alder Flycatchers. They gave the same song(s) as birds at Itasca (~40 mi. to east). I did not observe overlapping territories between alnorum & traillii; it could happen possibly as a couple territories seemed very close.

R. M. Zink
1981

Empidonax traillii

Clay & Wilkin Cos., Minnesota (see RMZ catalogue)

9-11 June

(written 11 June). I have now convinced myself that the 2 spp. (traillii + alburnum) have quite distinct vocalizations. The "fitz-brew" song is distinct from the 2 noted "fee-bee" of the Itasca (+ Glen) birds. Willows give part of the song (I think) or at least a buzzy, descending note, also unlike the \wedge of Alder.

I was surprised at the apparently high densities of Willows - for example 3 ♂♂ in the small area of willows at pt. A (W + S of Lauderdale). At pt. B, 2 ♂♂ were collected within 20 ft. of each other + a 3rd 30 yds. away. I have heard ♂♂ singing very closely, I even wondered if ♀♀ call. However, judging by reg. condition of ♀♀, that these birds are just getting territories set up (Least's seem further along); possibly there are still migrants.

I have also been surprised at how seemingly little brush (Willows or young Corylus) will support an individual. I guess I was expecting the habitat to be dense. However, I have found them from rather open to very dense Salix. Males seem to sing from low to medium (mostly) to higher - although this is really only a guess. Birds seem quite responsive to squeaks or pygmy owl calls, at least ♂♂ sing a call + I can then locate them.

R. M. Zink

1982

Empidonax striceps

vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica

19-23 Aug

We found this species both high, on road to Cerro de La Muerte, in the woods around La Georgina. It was less common at CM, due in part I believe to the lack of wood vegetation. The birds were seen in more open paramo, but usually near brush or small trees. Almost all (if not all) of the 18 specimens were molting. They are not shy & will respond to an imitation of their call note, a "whit" or ("twhit") or "twhat" very reminiscent of other Empidonax, especially E. albonus & E. traillii. We seemed to encounter clusters of birds (family groups?) in open (10x10m) areas surrounded by 3-10m brush & trees. They behaved/foraged like typical Empidonax.

R. M. Zink
1982

Empidonax flavescens

vicinity of Volcan Barba, Costa Rica

28 Aug.

We encountered this species along a stream with willow-like vegetation + other trees. I coll. 2 birds in almost the same spot. They tended to forage (few min. obs.) in the rather open areas in a 15-20 ft. tree, with deciduous leaves. The birds were quite tame. They called back & forth. I can't remember or describe the calls, except that they seemed rather atypical for an Empidonax - louder + longer, perhaps. However, they certainly looked & acted like Empidonax. I guess that in habit, they remind me most of E. difficilis.

29 Aug.

vicinity of Volcan Poas, Costa Rica

I coll. 1 bird in a wooded (riparian) draw at Km 20 along Ruta 9, on way to Volcan Poas. The bird was foraging about 10 ft. off ground, in lower part of a 20 ft tree (sort of alder-like). We also encountered 2 birds along edge of stream in typical montane cloud forest/riparian vegetation. Again, birds were 10-15 ft.

R. M. Zink

Pinyon Jay

1979

Wyman Cr., Inyo Co, Calif.

4 July

Larry & I observed a group of 88+ birds as they flew between pinyon (juniper) on canyon sides, all the while making a considerable noise. Larry descended to road & I coll. 3 in one shot (RMZ 10⁵⁰ 52). This group remained for ~ 2 hrs.

R. M. Zink

1978

Parus gambeli

Stanislaus National Forest, 20 mi. E of Tuolumne, Tuolumne
Co., California - on logging rd. to Reynolds Cr., 1. mi. from ^{Cottonwood} Rd.

27 May

Heard + then saw an individual (— — —) along road - mainly coniferous but bird perched in sm. decid. tree along road, called, then flew to low, cut-off stump on other side of road. (42) went to a hole + gave an insect to an adult inside. The stump was ~3' in diameter, 2½' high. The hole was perfectly round (40mm = dia.) + about 1½' from ground. I approached + picked + the incubating bird (presumption - no peeping sounds + couldn't see into nest) came to hole, blinking eyes fairly rapidly. The hole went too far down but was moist soft wood inside. The bird left + flew to a neighboring tree + called. I returned a couple times for measuring + the bird had returned + we went through the same pack-a-bos.

Stanislaus Nat. For. ^{see above}, Cottonwood Rd, 28 mi. from
Tuolumne + 1 mi. S of L. Cherry

27 May

Stopped to process samples + heard a bird calling. The general area is a 45 yr. old burn site (see Journal 27 May) + the bird was in a sm. decid. tree adjacent to an opening (along Cottonwood Rd.) I collected the bird + happened to notice a hole in this decid. tree + sure enough there was another bird inside. The bird did some of the "pack-a-bos" + then did an interesting display - it came about 2 in. from entrance then tilted body roughly horizontal, tail slightly raised + emitted a (strange) hissing sound (+ lowering

R. M. Zink

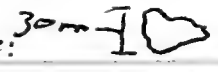
1978/1979

Parus gambeli

27 May (cont)

Stanislaus Nat. Forest, Cottonwood Rd, 28 mi E of

Tuolumne

and vibrating its wings). It repeated this display 2 times & then I flushed the bird by poking a small stick down hole. The bird proved to be a ♂ (RMZ-650). Must confess that there is a slight (<5%) chance I got the 2 birds mixed up on way back to car - but I think not. The nest hole was $4\frac{1}{2}$ ' from ground & shaped as: 

¹⁻¹ 50m Couldn't see inside but heard no

sounds. The ♀ (RMZ 649) had a well-devel brood patch.

Sierra Nat. Forest, Madera Co, California, T. 5S, R. 15E, sec. 36

22 June

In old burn site - presently manzanita & coniferous, found a nest hole, in a stump 10' high & 3' in dia. Hole was 7' S. facing. I sat next to the tree - the birds seemed to pay little attention.

Sierra Nat. Forest, Fresno Co, California, T. 7S, R. 76E, sec. 5

26 June

Over past 2 days have heard several calls, the spring --- + --- + a "teedle-dink". Bird respond to squeaking almost every time. Obs. 1 bird carrying food in its bill.

1979

26 May

1 1/4 mi. E Mt. Pinos, Ventura Co, Calif. [T. 9N, R. 21W, SW 1/4 sec. 33]

Have obs. several past 3 days. Noticed the call (3 note) goes --- (up on 3rd note).

R. M. Zink
1971

Parus gambeli

1 mi S, 1 mi E Red Bluff,

Kern Co., Calif

T. 24S, R. 31E,
Sec. 12

14 June

Found nest in hole at base of (4' dia) conifer stump. 1 ad
4 - \leq 7 day old young. Call note ---.

M. Zink
1978

Brown Creeper

Stanislaus Nat. Forest, Tuolumne Co, California, Cottonwood
Rd - 25 mi. from Tuolumne City,

28 May

In area essentially burned over, saw 1 carrying
nesting material to stand of few live trees. Bird entered
a hole of 7" in a burned stump (10' ^{high} + 3' dia.).

Sierra Nat. Forest, 2 mi. W Jackson Ranch, ^{T. 5S, R. 25E, sec 30} Modoc Co, California

21 June

Was skinning birds from 1100 - 1700 + several times a
Brewer's Wren made its rounds, along a very similar route &
even singing from ~ locations.

22 June

Again saw 1 bird several times from noon - 8:00 p.m.
following same route as yesterday

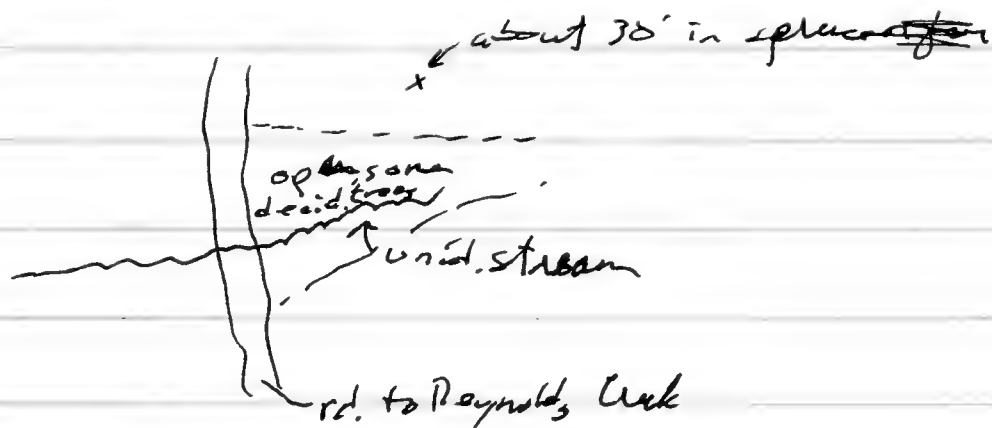
R. M. Zink
1978

Western Tanager

Stanislaus Nat. Forest, Tuolumne Co., California, off
Cottonwood Rd at fork (20 mi. from Tuolumne City) + 1.1 mi.
down rd. to Reynolds Creek

27 May

0700. Observed a ♀ building a nest:



I had earlier coll. a ♂ near here, but at any rate, only obs. ♀. The nest was $\sim \frac{1}{2}$ complete + apparently constructed of sm. twigs. She made visits about 1/min. + approached the nest from forest side (but few obs.). The nest was about 6-7' from trunk on narrow limb + apparently supported by needles + smaller branches.

R. M. Zink

1979

Green-tailed Towhee

7 mi. N Dome Rock, 2400m, Tulare Co., California

16 June

Found nest 3' in Arctostaphylos shrub, manzanita -
Ceanothus sericeus + Ceanothus chrysanthus w/ snags +
bordered by forest. Nest of grasses - coarse outer + fine inner.
3 eggs (white + unmarked) + 1 recently hatched.

R.M. Zink
1978

Junco hyemalis

Sierra Nat. Forest, Fresno Co, California, 5400', 1 mi.

S Shaver Lake T. 5, R. 25E, sec.

29 June

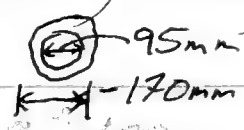
Observed several adults but also some w/ 1-2 fledglings.

R.M. Zink
1979

Junco hyemalis
Junco

1 1/4 mi. E Mt. Pinos, Ventura Co., California [T. 9 N, R. 21 W, SW 1/4 sec. 33]

26 May

Returned to a nest I found yesterday. It is situated
(50' x 50')
in a patch of 1' Ceanothus, bordered by small or large
Ponderosa Pines. The nest is on/in the ground + under
a fallen pine bough. It is fairly bulky + made of pine
glasses. Measurements:  95mm - 50, ~ 37mm thick.
170mm

1952m 1 Cond. of glasses

R. M. Zink
1979

Song Sparrow

Trail Camp, 9600-9608ft, Esmeralda Co., Nevada

5-7 July Common in willows (fruits dense) + not restricted to wet boggy soil like Fox Eg. Found 2 nests. One, on 6 July had 3 eggs. It was in a grassy tussock at the base of a 2'(young) willow at edge of a boggy pasture/meadow + a willow thicket. On 7 July a.m. there were 4 eggs. Other nest w/ 3 eggs in same situation. Considerable variability in ♂ songs.

Zink, R. M.

1978 - 1980

Species Act

Fox Sparrow

M. Zink
1978

Fox Sparrow

Stanislaus Nat. Forest, Tuolumne Co., California, Burn
area on Cottonwood Rd, 25 mi of Tuolumne

28 May

Observed ~15 today (coll 4). They keep quite low in brush + easiest to find singing ♂♂ (song perches low in tree): song is somewhat like Song Sparrow, at least ending phase. There was lots of brush around but Fox sparrows did not appear uniformly spread - but they might have been inactive during part of time I was collecting. Anyway there was indication of a preference + perhaps hosts to do w/ spacing of dead trees (a avail. suitable perches) density of brush + height, plant species (coll. 3 of dom. plant (shrub) in an area where several Fox sp. were singing. First bird coll. was "pished" out. Another bird was close by on ground but too close to shoot. Several X's birds would respond to "pishing" + come up, nervously look about, w/ tails cocked + then dart back into cover. Singing ♂♂ seemed to sit upright + could usually be approached. These birds appear "typical megascops". Saw 1 ♂ fly from singing perch to ground + join another bird. I only got 1, which proved to be a ♀ (RM2646) w/ a well devel. brood patch.

Sierra Nat. Forest, 3 mi N, 1 mi E Jackass Rock, elev. ~6400,
T.S. R. 25E, sec. 3E

21 June

Coll. 10 + saw many others in an area of manzanita (30-40%), exposed rock 10% (+ lots lge. boulders) + oak conifers. The birds, at 0830, were singing from many local. Some perched on dead stumps, some in conifers - usually singing post ~20'. While going through some heavy manzanita + fir, flushed a juv.

R. M. Zink

1978

Fox Sparrow

Sierra Nat. Forest, 1 mi N, 1 mi E, Tackass Rock, 6466;
T. 5, R. 25 E, sec. 3

cont'd

21 June

+ the adult ~~immature~~ rushed over - there was so much confusion I waited too long to get both, but did coll. an adult (653) giving a very nice broken wing act, about 15' from me + on opposite side of other parent + juv. - was under the 15' firs. Could often locate birds by the scratching, or fairly frequent ($\sim 1/4$ sec) chirps the birds give while foraging a ground beneath the manzanita. One bird was obs. on a large pile of logs flycatching + singing + calling. Many birds answered my squawking (esp. pair 655-56) but in p.m. (~~6:30~~^{5:45} - 7:30) there was little response - also reduced singing. Found 2+ other juvs - they were stubby-tailed (see R42-659) + giving a loud trill, from both in manzanita + up to 15' in firs. The agility of the adults in maneuvering through the brush is remarkable; I wounded an adult + chased it headlong through dense manzanita (w/ great discomfort to legs!) - it would keep just ahead + in densest parts - I finally dove in desperation + pinned it. I suspect that 658 + 660 are a mated pair but unsure. It was difficult to estimate territory size - there were no apparent singing bouts marking boundaries (birds singing concurrent were often removed). When walking through brush however I got the impression territories were fairly small (? 50m x 50m?), i.e. the density seemed high but I'd not be able at yet to give an estimate.

22 June

Hunted from 0800 - 1130, I particularly wanted to see if there would be birds on territory where I collected

R.M. Zink

1978

Fox Sparrow

5

Sierra Nat. Forest, Madena, California, T. 5S, R. 25E, sec. 31

22 June cont

yesterday. With the birds so common, the potential for a substantial fletcher population seems evident. There were few birds in spots hunted yesterday. Did find a calling juv. (R# 662) that could be young of R# 658 + 660. The bird was ~~almost~~ on ground + I almost stepped on it - it appeared weak + unable to fend for itself. I got surprisingly poor response from squeaking - especially ones worked yesterday. The call of juvs. is fairly common + is a fairly rapid, loud monotonous series of notes, given frequently. I tried to chase one + see if parents would show but nothing happened. Moved into adjacent mayan + got 4 birds - responded to squeaking.

Sierra Nat. Forest, Madena, California, T. 5S, R. 25E sec. 31 +

T. 6S, R. 25E, sec. 6

23 June

Hunted this area for some 3 hrs. (coll 14 birds). Along Miraret Rd is some mixed young pines + many ants. I squeaked a Fox Sparrow - or for 10-15 minutes before I could get a shot - it was singing from diff. place in a dense 30 ft² stand of 6-8' pines. This struck me as "marginal" habitat. I finally got the bird (yes I am) but got it mixed up w/ others but I'm almost positive it's R# 668 - was very wary + hard to approach (finally barked off + got it w/ 40). Heard another bird singing near this one. It's very difficult to describe precisely the habitat at this locality because of the varying mixture of scrub, ~~trees~~ ^{ben} + rocks. There's ~~lots of~~ ^{ben} ~~extensive~~ patches of scrub very large but loosely grouped patches form seemingly very good Fox Sparrow habitat. Also there's patches of conifers, + lots

R. M. Zink
1978

Fox Sparrow

Sierra Nat. Forest, Madera Co., California, T. 55, R. 25E, S. 4
319 T. 65, R. 25E, S. 4

23 June (cont.) of open (bare) ground. Nest ♂ was coll. from sm. fir at edge of manzanita patch (RMZ 669). In this area along + S of South Forks Rd. could hear 5+ Fox Sparrows singing at once. Chased one ♂ + it landed in top of a 38' spruce + called (RMZ 673) - This is the highest I've seen a Fox Sparrow. Shot a ♀ in manzanita patch + a fledgling flew from near her - the ♀'s ovary had an egg 12x6mm. The ♂ began singing from a nearby patch of manzanita + when I squeaked it came in + did a broken wing display (actually both wings were held over its head + it ran along ground squeaking) I collected it 677 as it ran across open ground. I noticed this earlier - when the ♀ is shot, the ♂ comes in singing or calls from nearby conspicuous perch. The soil is loose, fine (dusty) + gray. Other ♂♂ were collected from stumps + sm. trees in + at edges of manzanita patches.

~~Many~~ Most of birds taken yesterday were infested w/ mallophaga, esp. throat feathers. When shot this bird the lice crawled up into cotton (several were collected). Most of the birds had light fat loads, no molt. The ♀ had well developed brood patches.

Sierra Nat. Forest, Fresno Co., California, T. 75, R. 24E, S. 24


25 June

There is a brush field at this locality, accessible from Strong Creek Rd. Much of the brush was poisoned by the forest service but some dense live patches + scattered clumps remain. The slope is 45-55°. Lots of young ponderosa pine. Heard 2 Fox Sparrows singing in the manzanita

R. M. Zink
1978

Fox Sparrow

Sierra Nat. Forest, Fresno Co., California, T. 7S, R. 24E, Sec. 24

25 June (cont) + collected 2 males (Rm 2679-80). The habitat here is somewhat different than the Jackson Rock locality (see 23 June for ex.) because of the rather high density of young pines. Rm 2680 was in dense manzanita w/ another Fox Sp. making chipping sounds. I squeaked it to the edge of the manzanita + shot it as it foraged on ground, chipping as it went. Rm 2679 was calling for most of the 1 hr. I was there, near a riparian patch, consisting of some 30-35' decid. trees (Boxwood? leaves = , Pines + Cedars + dense fern understory. I squeaked the bird into the pines + coll. it. This area seemed substantially different than the others so far because of its elev. (4900'), steep slope + vegetation.

Sierra Nat. Forest, Fresno Co., California, T. 7S, R. 26E, Sec. 5

25 June This is at site of a fairly large brush-pine community at 7300'. Take dirt rd. (off Stump Springs Rd) to ~~the~~^{mt.} Tom lookout. I stopped about .1 mi as a snowdrift blocked the road. About a mile further, there are patches of Ceanothus + manzanita interspersed in varying densities w/ pines + a few decid. trees. The slope is slight 5-10° ~~to the~~^{N→S}. I collected 6 Fox Sparrows in an hour, between 4:00pm - 5:00pm. I've found that even though there are birds present on adjacent areas they don't (at least at this time of year) sing concurrently, so by squeaking loudly you can often get 2♂♂ to betray their position + on approaching (under ^{or behind} cover if poss.) + squeaking loudly + persistently the birds will come very close. They also have a variety of chips + clatters - the chips are especially used when disturbed or both are

R.M. Zink
1978

Fox Sparrow

Sierra Natl Forest, Fresno Co. California, T. 78, R. 26E, sec 5

25 June (cont)

foraging on ground in (dense) brush. The pair seems to maintain a close contact in this manner. As before, it is often easier to get the pair if the ♂ is coll. ^{1st} however not always. Singing perches were again varied - mid of a 45' spruce for 2 ♂, others from any exposed perch near vantage point. Posture during song delivery seems to be typical passerine - beak pointed up at 45°, whole body gets into act. Speaking of calls, they should be v. easy to record + there is a noticeable difference in calls - seemingly both in type (i.e. ≥ 1 /male) + variation bet. ♂♂. Watched an individual (RMZ 686) foraging ^{on ground} in manzanita patch. It hops, then scratches back w/ both feet. I examined the area where the bird was foraging. The litter, consisting of manzanita leaves is 1-2" thick. The bird had (easily) scratched this away + worked down to the loose, fine & ^{clumpy} topsoil - the dia of the scratching was ~ 3 in. My overall impression today was that this bird is quite adaptable in terms of habitat (certainly no precise requirements, at least in a general sense) + elev. The 2 ♀♀ coll. today had much less developed ovaries than the birds at Jackson Rock - perhaps breeding is behind at this elev - however one ♀ (RMZ 681) had food in its bill when collected. There is still a considerable amt of snow drifts in woods + the nights are tree cool.

26 June

Hunted for Fox Sparrows from 1000 ~ 1200 on slopes above dirt Rd to Mt. Tom elev. 7300-7500. There is some fairly dense patches of brush, in the lower patches ^(in height & etc)

R.M. Zink
1978

Fox Sparrow

Sierra Nat. Forest, Fresno Co., California, T. 7S, R. 26E, S. 25

to T. 6S, R. 26E, sec. 29, along rd. to Mt. Tom

26 June cont of brush, the birds were relatively hard to squeak out (perhaps due to time of day - 1100-1200). In later afternoon (3:50) & further down road, heard 4+ singing at once. We noticed that areas we squeaked & shot in previously, the remaining birds are much less responsive to squeaking, while further down in new areas, it's relatively easy to slowly approach a singing ♂ & squeak if it, ♂♂ do seem slightly more responsive to squeaking than ♀♀. ^{note - due to 1st day of song} ^{lots of harassment/heard.} Coll. total of 15 at this locale.

Sierra Nat. Forest, Fresno Co., California, Swanson, Campground, T. 10S, R. 25E, NW 1/4 sec. 6, ~ 5400'

27 June Heard 4+ singing alone & birds singing throughout day. Considerable variability in song, which seem to be given just about any time. There do seem to be some territorial calling now that ♂ sit in crevices & listen, as bird call consecutively from their perches in patches of margarita.

28 June 4+ calling at 0930.

Sierra Nat. Forest, Fresno Co., California, T. 10S, R. 13E, NW 1/4 sec. 4
^{in soft shadow later}
^(12:00-2:00 - overcast)

28 June Coll. 6 + heard many in the dense stands of Leontodon, w/ some margarita. Several lines heard ♂♂ singing w/ 20m of each other. The density here seems higher here than the previous locale, perhaps owing to the more continuous brush. Here, the Leontodon gets v. dense & up to 5-6', while the margarita also occurs in dense clumps up to 5'.

R. M. Zink
1978

Fox Sparrow

Sierra National Forest, Fresno Co, California, 1 mi S
Shaver Lake, T. 10S, R. 25E, ^{N¹/₂} sec. 4 5400

29 June

Hunted from 0730-0915 - overcast, cool.
Collected 5 birds from "typical" locations. They
are very responsive to fishing. When one is in
a tree I can almost always get food by carefully
pishing/squeaking + the bird inevitably come out
on an exposed branch + wave their necks + act nervous
(but remain fairly close). Again observed singing ♂♂
in ¹⁰⁻20 m - prob a bit of the dense more extensive
brushy area. Tried to collect a singing ♂ that was
using a perch 20' in a Maple Tree but the bird
was too skittish.

30 June

0545-0730, clear, cool/rain. Collected 8 + obs. prob 10+ more.
Found them in nearly all areas of this heterogeneous
habitat. They were in dense patches of leatherleaf, leatherleaf
+ marguerite + marguerite (scrub $\leq 4-5'$) + woodland-scrub
edges, + even coll. 1 bird (R¹ 715) in an oak in a
woodland-scrub area. They seem to be absent from ^{stands} ~~stands~~
of conifers, but readily perch in conifers on bordering
scrub. Also obs. 2 ♂♂ singing from utility wires

Stanislaus Nat. Forest

9 July

Found a high density of Fox Sparrows in the area I
hunted 28 May 78. Habitat description in Journal. The birds
were considerably harder to approach than near
Shaver Lake. And when I got close often the brush
was so dense I didn't shoot, so I lost 2 birds at the
start. The songs of some ♂♂ seemed different than

R.M. Zink
1978

Fox Sparrow

Stanislaus Nat. Forest

9 July

any I heard near Shaver Lake, but I also heard the "typical" song from several ♂♂. The unusual song almost resemble the Lazuli Bunting.

9-10 July

Am quite sure these birds are more skittish, at least now. I had great trouble approaching singing ♂♂ w/in 410 range. They fly when in 40-50 yds. away! Also they don't sing as frequently or for as long. I suspect this may be attributable to several things: 1) Time of year - many birds are molting, young are nearly full grown & probably self sufficient, territories not defended as vigorously (2nd nestings?) + 2) the habitat is such that my approaches are screened - also the birds seem to utilize ^{stall} higher perches (20-30') to sing from. And the dense brush makes it difficult to proceed, except along the many trails. There seemed to be a fairly high density, but hard to locate birds. In general birds seemed spooked by pisting & squeaking (while everything else flocked in). The marked difficulty in approaching singing ♂♂ make this a rough spot, hopefully due to habitat + perhaps it will be easier (this time of year) at higher elev., where breeding season probably 2-3 wks behind this spot.

Bear Valley area, Tulare Co. California 6200'-6900' T. 7N, R. 17E, Sec. 34 & 25

11-12 July

Coll. several hours in mixed Ceanothus - manzanita + conifers - densities vary, w/ stands of conifers + ^{small} exposures of brush + mixed. + hundreds of granite outcroppings. 11 July - along Hwy 4 above 6000' edge of brush along rd. + southern Fox Eg? - coll. (at Hells Kitchen Vista pt.). The

R.M. Zink
1978

Fox Sparrow

San Valley area, Tulare Co., California, T. 7N, R. 17E, Secs. 25+34

11-12 July (cont.) densities do not seem as high as Shasta Lake area but perhaps they're not singing as much this time of year. The birds are very responsive to squeaking + a couple ♂♂ came from 30-40 yds to within 10' of me (+ their deaths). The sort of metallic sounding chirp or chunk is distinctive + I can tell it easily from the call notes of Junco, G.T. Towhee + Ch. sp. Sparrow. The juv. Fox sp. are nearly full grown but their call note is distinguishable from adults. Call a few juvs, mostly by accident. Watched a juv. on rd calling + adult (as a result of my presence) kept calling to it [dunno what for a 2 in a row] + it finally gave a different call + the juv. went under cover. In general the juvs. are as wary as adults. Am having trouble sometimes w/ call of G.T. Towhee + Fox sp. - but have at least the song of G.T. Towhee ends w/ a buzz, reminiscent of Rufous-sided Towhee. Am having some luck w/ my very crude Fox sp. imitation - sometimes works + other times not. Sometimes I know a bird is very close yet it doesn't call or make any noise or respond to picking. See specimen for molt wear - some are very ragged. ♀♀ have non-vascularized (heavily that is) brood patches, + sm. follicles. Wonder if they re-nest.

addn [11 July 0600-0700 - saw 3rd Fox sp. at 7600-7900 near Krt. Rd - see Journal - here there were so many G.T. Towhees it was hard to pick out a Fox Sparrow.]

12 July Hunted slightly further down rd (see Journal + Catalog for loc.) from 6:15 pm to 8:30 pm. Had difficulty approaching birds; heard prob 60⁺ ♂♂ - they started fleeing at my approach - perhaps it was

R. M. Zink
1978

Fox Sparrow

to W. L. Tahoe

Bear Valley area, Inyo Co., California, T. 7N, R. 17E, sec. 25, 26, 34

12 July cont. The time of day - as it was very still - also the ♂♂ were not persistent in singing as long as they did earlier today - just a couple renditions they'd hold for the brush.

13 July 0600-0700. Not much singing but birds were fairly responsive + coll. 3. I wonder if they begin foraging at dawn? Check station of R MZ 742-44. This area is definitely worth re-sampling, as I think densities are high enough to yield a large sample: I got 18 in 2½ days.

W. L. Tahoe area, Placer Co., California

~~14 July~~ Drove out rd. from Kaspian Campground (Eagle Peak) to about ~~the~~ past Barker Pass (see Journal). Several small areas of brush + some willows in small narrow canyons. Heard sev. Fox Sp. but at mid-afternoon could not approach any. Not a worthwhile area to collect as the slopes are steep + Fox Sparrow habitat is not extensive. Then went to T. 15N, R. 16E, SW¼ sec. 33, elev. 6400', + found several Fox Sp. in a mixed conifer woodland situation. Coll. 2 in short time. The birds were quite responsive to picking.

14 July 0900-1100 in same area saw/heard 8+ but only coll. 1. H. & 2+ others + could not find. There was quite a bit of singing but it may have been partly attributable to my constant picking, squeaking song in station. Was very difficult to approach the birds. Observed one ♂ singing at 60 feet from top of aspen for 5 min. I think the time of day has a great deal to do w/ how easily they're approached. The bird I coll. (R MZ 747) was a ♂ + was definitely in the territory of another ♂ - as I observed the

R. M. Zink
1978

Fox Sparrow

4 mi E Ward Pk. 6500-6700'

W. C. Tabor area, Placer Co, California, T. 15N, R. 16E, NE 1/4 sec. 14

14 July, cont. Territory holder many times (13+14 July) singing from tree 10' from where I call. #747. #747 was silent. It may have been attracted by my squeaking? Floater?

Later went to

There's fairly extensive

area of ^{mixed} brush & forest. At 7:00 p.m. found the (common) birds easily approached & call. 5 in 45 min ~~many~~

15 July 0645-0730. Call. 8. There was little singing (only 2) but the birds were easily located by their call note (loud chirp) & could be squeaked in & approached. Several were gathering insect food. Perhaps they've got young

in nest as I saw no ^{young} ~~at~~ ^{at} ~~Sycamore~~ ^{Engelmann} heard ^{at} 0520

16 July 0630-0830. Only heard 2 birds sing & I think it was in response to my squeaking. The birds are reluctant to show themselves but are still sufficiently responsive to squeaking. I've noticed that when a bird is giving its call note (chirp) it can be easily approached, especially if it's on the ground - just get close & start to "psh" & they almost always ~~show~~ ^{expose} themselves. Also when they are in trees it's often easy to approach (squeaking or pishing) to within gun range. When they're not vocalizing you need to watch closely as they tend to sneak away silently. Many of the birds are carrying caterpillars in their beaks. Watched one bird foraging in a 15' pine at 5:00 p.m. It worked its way up the trunk constantly, esp. underside of branches. Observed similar foraging in a manzanita. (active searching)

R. M. Zink

1978

Fox Sparrow

Sagehen Hills, Nevada Co. California, 6300'-6400', T. 19N,
R. 16E, sec. 32 + 33

18 + 20 July

Collected 17 birds in S¹/₂ of Sec. 33 + 4 in SE¹/₄ sec. 32. This is by far the most extensive Fox Sp. habitat I've seen in. The 1960 burn (38000 acres) has gone mostly to brush (for veg. description see Lynch + Johnson (Caden 1978), except that the Forest Service has bulldozed some. Other areas are apparently typical post-burn succession. I think that w/ the natural regularity of fire (in historic times) Fox Sp. habitat must have always been a fairly available habitat.

Most of the adults are very worn, wing + tail are badly frayed, as well as a general "coat" of worn body feathers. Have picked up a high frequency of molt - some w/ body molt (on ad. had body molt - I forgot to record it) + several birds w/ wing + tail molt. Singing, sp. in early a.m. (< 0830) is not infrequent but again I feel that much of the singing & hear is in response to my presence, squeaking, or picking.

For habitat of specimens of this local sci. found. I've essentially quit giving precise local or site where bird was coll. as a given Fox Sp. can move from ground to brush to tree in very short time + precise description is prob. more misleading - do birds often go to top of bush or tree because of my picking. #1

Marty noted that the birds are more common in

R. M. Zink
1978

Fox Sparrow

Sagehen Hills, Nevada Co., California, 6300'-6400', T19N,

R. 16 E, Secs 32+33

^{cont}
18+20 July

the densest brush around although they certainly
occur in loose brush.

R. M. Zink
1978

Fox Sparrow

6 1/2 mi N, 7 mi E Lassen Rk, 7600', Shasta Co. Calif.

26 July

Found Foxg. common-abundant in brushfields along rd. 32N12 (see Sound for locs). Heard ♂ sing at West Property pk L.O. (8137') + there were sev. singing in mangroves along rd. Coll. 10 today. Up to 5+ ♂♂ singing during a.m. + many in brush. They were quite responsive to squeaking. Song sound fairly diff from further S + some diff. chirp notes (juvs?). Juvs. ♂ may sing a short version [fairly certain saw a juv. sing at Saghen]. Song perches were tops of brush to tops of conifers (30-40').

In evening coll. a v. darkly marked ♂ (RM 2815) in brush. I shot it at 2x + there was another bird near (shot at 1x), which going back up to rd I stopped on a ^{branch of a white} that ^{that overlay some manzanita on side of road} recently fallen, ~~bordering brushfield~~ ^{bordering brushfield} apparently stopped in a Fox Sp. nest! At 3 fledglings went running (starty) off - I caught 2 (RM 2816 + 2817). It seemed suspicious as the tree seemed recently felled, but the birds came from very near the nest (sawed), which had a tiny base & loosely woven cup (but I also damaged it by stepping in it). It almost looked like an old nest, will have to compare w/ other nests.

27 July

Hunted 0600-0730 + 6:15 p.m. to 7:00 p.m. Birds were singing throughout much of the day - except warm part of afternoon, & got the feeling that birds are starting to move around & not be as territorial - although some pairs obviously still are feeding young (e.g. R28 16 + 17). There doesn't seem to be a correlation of singing &

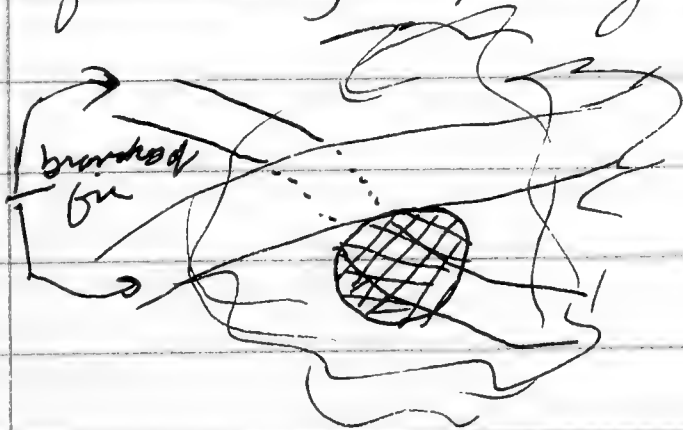
R. M. Zink
1978

Fox Sparrow

102 mi. N, 7.0 mi. E Lesser Peak, 7600', Shasta Co., Calif.

27 July (Sat) Testis size. A couple birds approached in response to my squeaking silently on the ground under cover of brush. Some still respond vigorously + fly in to the sounds. There didn't seem to be much activity before the sun hid the slopes. ^{Timed a ♂ singing at 2:00 p.m. - intervals between songs: 12, 15, 15, 18 sec. (+ other birds).}

28 July 0700-0900 coll. 3 Ad + 3 Juv. The juvs. are very difficult to distinguish + these 3 were essentially "shot accidentally". One was giving away adult-like call note ("chirli") + landed in top of a manzanita. In other words it responded like an ad. ♂ - calling from distance + in response to squeaking comes in + sits in top of brush. However other birds (? mostly ♀) continue to approach very quietly on ground + on several occasions was much too close to shoot. Some singing throughout day but over 5:30 pm to 9:00 pm, was very quiet - few birds were singing or calling. Most activity seemed to be 8:30 pm - 8:45 pm + I walked a lot of good habitat (that I hadn't walked before) + found O. Revisited the site where juvs. appeared to come from nest. There are sev. 1st branches of a fir along rd, at edge of brush. The nest was ~~in~~



- there were some manzanita bushes under + next to the fallen fir branch.

So it's possible the young were hiding there - as the nest seemed odd + ill-placed for a Fox Sparrow.

R. M. Zink
1978

Fox Sparrow

6 1/2 mi. W, 7 mi. E Lassen Peak, 7600' Shasta Co. Calif.

28 July ^{cont.}

Flushed an ad. & juv. near where I col. a (singing) ♂.
So there are indet. fledglings & defend. juvs at this time.

29 July

Hunted extensive brushfield 8700-8900 (see map in journal) & got 6 Ad & 1 Juv. Fox Sp. Birds very common & easy to squeak in also many ♂♂ singing. Juv. from v. small (giving food begging call) to indet. juvs. Had some prob. w/ birds approaching on ground in brush & not getting clear shots. Cause of this brushfield unknown but for. Sr. has stacked much brush in an apparent attempt to replant but brush has successfully re-invaded.

R. M. Zink
1978

Fox Sparrow

Sierra Natl. Forest, Fresno Co., Calif. ^{see Journal for 1978 & 1979}

21-22 Sept

Have coll. 12 birds; four of which are birds from B.C. The birds are using brushy area, much the same as during breeding season. They are perhaps less responsive to "pishing"; they tend to be "clumped" but I'm not sure they aren't preferring mangonits of a certain wt. - also the mangonits are in berry. There seem to be definite activity peaks - 0800-01000 & today (22 Sept) one at 6:30 p.m. The ~~notes~~ ^{have} ~~make~~ diff. call note but I can't key them as yet. At Shaver Lake heard (both a.m. 21 Sept & a.m. 22 Sept) a weak song, "Ayy-rat" of this locality. The birds seem to be slier than during breeding season.

23 Sept

0800 act. vity seemed to be high. Again got the impression that the birds were localized in pockets. By 0900 was worn and 2-4 birds were singing fairly typical song (for the area), some in apparent response to my pishing. Got fair response to my calling. However many birds get to scratching under brush & don't seem to notice me, except to slowly move away. I try throwing sticks & rocks to get them to flush across an opening but doesn't work too well. Again noticed difference in call notes - the "northern" birds seem to give a high "seep" vs. the "metall. chink". Coll 2 juvs. molting into ad. plumage - I have to think they are residents.

R. M. Zink
1978

Fox Sparrow

1/2 mi. S, 2 1/2 mi. W Back Mt., 5400 ft., Fresno Co., California

28 Oct. 78.

Spent much of day hunting Fox Sparrow in this area I visited during late June + late September. Heard no singing of Fox Sparrows + of the 7 I coll. today I doubt that any were residents. Most birds rich brn. w/ yell - yellow-orange lower mandibles - some w/ yellow on lower portion of upper mandibles. Most seemed young (stout without breast). In general they were quite responsive to squeaking + pishing, + often several would answer. Other times the only indication of their presence would be a faint rustle in the leaves. Col notes different from residents - a higher pitch "A-seeet". These birds were foraging in same places as residents. Do the migrants force the residents out? The migrants are perhaps smaller (more efficient) or are there social pressures. I have a gut feeling that an "optimum" habitat patch has certain characteristics, many of which I haven't yet identified - or the birds aren't distributed ubiquitously while there seems to be undisturbed habitat. Examples of a brush patch + height of patch. Add'l, then such as trees or stumps, snags or large rocks seem to increase the "Fox Sp. suitability". There is perhaps a threshold height, under which they're too subject to predation. Saw no inter- or intra-specific interactions. Despite their seeming disregard for my presence, they

R. M. Zink
1978

Fox Sparrow

2 mas, 2 juv. by Bald Mtn. 5400 ft, Fresno Co., California

28 Oct. (cont.)

hardly move into clear lanes (at least those clear enough for me to shoot). Would be hard to estimate densities. With only 1 case here - sufficient open (natural) lanes.

29 Oct.

coll. 3 birds in manzanita - leucostictus. It is interesting that Fox Sparrows of diff. morphologies (i.e. breeding vs. migrant races) apparently utilize the same food resource - also that several diff. morphologies exist, at least in winter, syntactically. The calls of the migrants are considerably \neq to the breeding pop. - " make a higher pitched "seet", which perhaps serves to keep individuals in contact - or spaced. There seemed to be a peak in feeding activity ~ 0900 - when sun hit brush. There was not a uniform array or spread of birds throughout the brush, but seemingly localized foci of birds activity. The site or microhabitat of this activity seemed to be in brush 2'-4' high & fairly extensive. Possibly they could be feeding in loose flocks (a family group?). I also encountered lone silent individuals - often their presence was detected by their scratching in the leaf litter (& often only apparent to my ear & not to others w/ me).

R. M. Zink
1979

Fox Sparrow

Mt. Pinos, ~8500 ft., Ventura Co., Calif. [T. 9 N, R. 21 W, S. 4 Sec. 33]

24 May

Aim here to collect Fox Sparrows from the isolated population of *P. i. stephensi*. Birds were quite common although spread out due to very patchy nature of *Ceanothus* occurrence. In fact there are not sizeable brush fields, ~~but~~ ^{but} ~~8-9 song~~ from pines - both at top & off the dead lower branches. In general they pick out something high, whether dead branch or live. Recorded several indivs. this a.m. Fairly easy to approach & they often sing 15-30 songs ^{in a row}. Began to sort out great diversity in song types. Found 2 nests (description tomorrow).

26 May

At nest - 4 eggs under *Ceanothus* .. Took photo of eggs + nest. Nest:

⊙ 60cm - a deep, thin-walled cup of grass & some twigs interspersed.

♀ left v. quietly + returned w/in 5-10 feet + made no sound. It is likely that I coll. the ♂ on 24 May. There is one ♂ singing about 100m away. As it moved away from the nest, the ♀ moved right back.

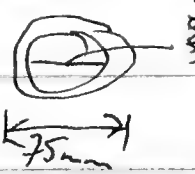
Relocated nest of RMZ # , 4 or 5 eggs. When last left the nest, there was 1 uncovered egg. Today the egg was present + it was covered w/ loose grass. A male heard singing nearby. The nest is located at the base of a 3' *Ceanothus*, in

R.M. Zink
1979

Fox Sparrow

1 1/4 mi. E Mt. Pinos, Ventura Co, Calif. [T. 9N, R. 21W, SW 1/4 sec. 33]

26 May (cont)

a patch of Ceanothus 70 x 30 m on a SE facing hill of slope 15°. Nest made of grasses w/ some twigs interspersed, especially at top. Dimension  55mm
leg remaining. Photo of nest by hot

27 May

Coll. 5 this a.m. in one spot, & coll. a ♂ (+ found nest - see below). In 20 min. another ♂ perched in a fir tree immediately adjacent to the 1st ♂ territory & sang a 1st song. Then he left (& did also). I suspect there is a rather sizable population of "surplus" ♂♂ "floating" around. Noted yesterday that calls/songs tend to alternate endings - 1 buzz 1 sharp dropping note. The nest had 3 eggs & was at base of 3 1/2' Ceanothus. There was not much of a cup.

stalks of Ceanothus
not lining, only dirt
some grass

} not nearly the degree of construction as the other nests observed.

1-2 mi. S + 0-1 mi. E ~~Red~~ Red Mtn, Kern Co, Calif.

13-14 June

Have coll. 16 birds. Have seen adults carrying food to nest (haven't found any). There are some fairly dense pockets of Ehretia, Ribes which serve as a "chaparral life form" - however this plant community (the southern Sierra ^{post fire} succession) is very different from the manzanita - Ceanothus chaparral of further north - it is higher (to 8' 9'). The birds seem to "adapt" - did notice ♂♂ singing from lower

R. M. Zink
1979

Fox Sparrow

1-2 mi S + 0-1 mi E Red Mtn, ^{6350-6500 ft}, Kern Co., Calif.

13-14 June ^{Cont.}

in the brush than before (like 1-2'), we collected a ♂ away from brush along a road singing from top of a 50' conifer - had yellowish undertail venter. The vocal repertoire seems quite different from that of Mt. Pinos. We collected a couple birds after recording songs.

15 June

Cont. to coll. in a.m. While this entire area is basically open, the Fox Sparrow habitat is patchy - i.e. only where the Elderberry is sufficiently thick does ~~the~~ a pair (+) exist. There was not a lot of singing this a.m. (fairly warm + still). Have to "pish" to get ♂♂ to respond. Often a distant ♂ will respond to my whistled imitation ^{one of} their 10 songs. We had trouble coll. individuals after recording and several birds weren't terribly interested (seemingly) in the playback of their calls. Again saw adult carrying food in their bills. There are many groups of tent caterpillars on the Ribes + I think the Fox Sparrows are feeding them to young. Again noted the vocal repertoire of given individuals is highly variable + ≠ Mt. Pinos calls. It's possible that the vocal phenotype is too plastic for a less than thorough study. Again - the elderberry community seems so atypical for Piedra, yet its "life form" is mountain chaparral. ♂♂ noted singing from 30' in dead branches of Incense cedar spray to 1' in base of 3' live elderberry. Call note "chink" seems same as other Sierran birds I've heard.

R.M. Zink
1979

Fox Sparrow

Tiger Flat Campground, 2020 m, Kern Co., Calif. (T. 255, R. 32E, S. 4 sec. 5)

15 June

Driving N from Greenhorn Summit (6102' E-se. 20) we
started to see small patches of manzanita. At Tiger Flat
heard 2-3 ♂♂ + nested a ♀ w/ inc. Patch - released. Heard a
"typical" 1st call: - 'L ... - - -

T. 245, R. 32E, NW 4 sec. 20, 2100 m, Tulare Co., Calif.

16 June

Stopped along rd. at old burn w/ extensive brush field of
manzanita + Condalia. There was a very high density
of Fox Sp. Note - this is one of the first "typical" brush field
seen N of the elderberry (i.e. typical) cleared of 15 mi. So
could be a good place to collect in future

Tr. N Dome Rock, 2400 m, Tulare Co., Calif.

16 June

Hunted ~1200-1330 + saw little. Habitat consists
of patches of chaparral (manzanita, Condalia + Ceanothus
sericeus) interspersed w/ rocky outcrops, boneless
snags + open mixed forests of fir - pine + iron cedar. The
chinquapin seemed to be most dominant followed by Arctostaphylos.
Even in pa. we could "pick" out v. few fox sp. + I can only
assume either 1) low densities 2) too much chinquapin, or 3) birds
not responding for some reason. Coll. a ♀ which was carrying food
in bill.

17 June

Had same luck early a.m. Birds shy + seemingly rare.
However, several birds did respond to squeaking, but only when
I was near.

afternoon of 17,
18-19 June

On 17th drove to 4 mi. N of Dome Rock, 2225 m, & found
Fox Sparrows to be abundant + we coll. 8 in ~1 hr. +

R. M. Zink
1979

Fox Sparrow

4 mi. N Dove Rock, 2225m, Tulare Co, Calif.

(cont)
17-19 June

saw many more, incl. 1 fledgling. They are in brush
patches of ^{Bittercherry} Prunus, Castanopsis sempervirens + some Arctostaphylos
+ Ceanothus. Also, ♂♂ often sing from large fir + pine at
brush-forest interfaces. Some ♂♂ seen in ^{open} forest, usually
near fallen snags. These birds are very responsive to
"pishing". Have had rather poor luck recording. Many
♂♂ stop singing when I'm in range - or else they sing 2x + split.
Directly next to our tent is a ♂ who starts singing at least
by 0525 + sings at least 1x/15 min. + often incessant.

20 June

Nested 1 night of 19th + 3 this a.m. We certainly got the
♂ which had been singing ^{almost} incessantly (0525 on yesterday). His
neighbor (3 others removed) continued to sing. The occurrence
of 4 sparrows in a very limited area suggests that
either there are singles birds "floaters", or that territoriality
is restricted to vicinity of nest. The habitat in this
area (for P. itaca) is brush $\frac{1}{2}$ -2 m + includes Prunus,
Arctostaphylos, Ceanothus, Ribes, Castanopsis +
fallen + standing snags, isolated + edge fir, pine +
in some cases serving as song posts for ♂♂. We
tried to keep all 3 alive for keytypes, but the two
♀♀ ~~died~~ ^{died} near of H₂O administered. The ♂ was keytyped
(at least an attempt was made).

21-24 June

Have coll. sev. near "Horseshoe Meadow". Vocal
repertoire as usual varied. Birds have been coll. from
fir + pine trees, + various standing + fallen snags +
from various locations in Ribes, Prunus, Arctostaphylos,
Ceanothus + Castanopsis. I haven't noted the precise

R.M. Zink
1979

Fox Sparrow

House Corral Meadow, 2200m, Fresno Co, Calif. (see catalog)

21-24 June (cont.)

position of each bird, or within a span of a few minutes, a given individual can go through about 10 different "micro sites", especially when being chased. I again noticed that the birds were shyer + harder to approach when the habitat is brush-^{lower} woodland - the vertical dimension seems to give them an added advantage. They also seem to be denser the more homogeneous the brush. And in brush, they seem easier to squeak in. Noted on evenings 22-23 June Fox Sparrows, Green t. tawees, Junco flycatching winged insects (? some saved). The insect would fly over brushland + a fox sp. would dart up + catch it, often showing very agile aerial maneuverability. Several chases were seen + an aerial encounter (possibly) was observed, where 2 birds were doing insect catching flight moves (incl. rolling over + twisting - usually return to different branch - a real addition to their foraging capabilities) they seemed to flutter momentarily in mid air, facing each other. This could have been some form of courtship or incidental encounter due to trying for same insect. These dusk aerial foraging activities are a considerable surprise, for usually the fox sp. is on ground on some solid substrate. Did not note any (unusual) vocalizations w/ this foraging behavior.

R. M. Zink
1979

Fox Sparrow

"Shaver Lake" $\frac{1}{2}$ mi. S, $2\frac{1}{2}$ mi. W ^{Bald Mtn.} ~~Shaver Lake~~, 5400 ft., Fresno Co., Calif.

25-28 June

Tried to record vocalizations + got very few. The birds were not terribly cooperative as they seemed to be "afraid" to sing. Perhaps they are not doing much singing these days, as they haven't yet started on brood #2 (did see essentially full grown young). At any rate, it was frustrating trying to record. Many birds would only sing a couple songs. However, the birds that did sing showed the usual high levels of variability, & I wonder if it wouldn't require an incredible # of recordings to put them to systematic use. Observed birds foraging in usual places - under manzanita. Saw ♂♂ sing from 30' in oaks, ^{incense cedars} firs, pines & also from brush tops (+ w/ brush) & from snag & rocks.

White Mtn., Inyo Co., 8100-7350 ft., Inyo Co., Calif.

2-4 July

Have spent late pm. - 4th searching willow thickets for Fox Sp. Most notable is the low density, relative to the Sierran chaparral. The birds are fairly responsive to "pishing". Call notes seem similar to Sierran birds. The few ♂♂ which sang had song similar to Sierran types. However, there were so few singing I could make no real assessment. The critical factor in their occurrence is a rather dense stand ^{5-15' x 10'} of willow - w/ underbrush of Rose, Ribes ^{+ near stream} & willows. Smaller stands or those w/ no undergrowth (due to grazing) seem to support no birds. Coll. a juv. Also noted several birds w/ fairly notable # of gut parasites. Haven't been able to

R. M. Zink
1979

Fox Sparrow

Wyman Cr., 8100-7350 ft, Inyo Co., Calif.

4 July

observed foraging. In fact, it's hard to see them at all. Song perches incl. dead willow, tall rocks. As we drove down canyon, the Foxes seemed to drop out at the point where the canyon is narrowest, possibly correlated w/ an apparent ^{+like} sin willow species. However, it was nearing dusk + I'm not sure. Since a diff. bird than the Sierra form(s).

Trail Creek, 9000-9400 ft, Esmeralda Co., Nevada

5-6 July

Have found them few + far between. This a.m. of 6th I walked to large grove of willow + aspen/birch near top of Trail Canyon. As Lindale (1928) noted, the birds seem restricted to a specific combination of boggy soil + fairly dense ($\leq 15-18$ ft.) growths of alder, willow + water birch. Seemingly good patches of willow, like those yielding Foxes in Wyman Canyon, do not seem to have birds. Also, they seem fairly shy + sometimes hard to approach. Yet, some respond vigorously to probing. I heard a ♂ sing along a growth of willow + got in position + "squeaked" it out of the willow to a Rosa (contra Lindale who said they wouldn't leave the willow) - it flew back to willow + was collected (RMZ 1061). I heard at most 5-6 diff. ♂♂ singing, although the habitat seems extensive enough to support 3x that number.

6-7 July

Have had difficulty approaching birds. There are places

R. M. Zink
1979

Fox Sparrow

Trail Canyon, 9000-9400 ft, Esmeralda Co., Nevada

6-7 July (cont.)

where I saw birds on 5-6 + couldn't relocate on 7th (L6th). I suspect they only respond to squeaking + after that avoid the sound. I was unable to attract singing males by squeaking, pishing or imitating song. Found it best to approach as quietly as possible. Again noted that they are only where soil is wet / boggy, incl. standing H₂O @ rather dense willow, alder or water birch + @ underbrush, young Salix or Rosa. There were few singing ♂♂, suggesting low densities. Only coll. 1 ♀ so I suspect they are on nests at this elevation + don't flush unless going very close + I'm prob. missed.

Afternoon of 7th we headed down Trail Canyon, to go to Christy Cr. About ¼ mi. E of prev. camp (9000 ft) I heard a singing ♂ (RMZ 1067). I had thought that if the birds were scarce at higher elevation, they'd be non-existent down down. I hunted the thickets of willow for the next ½-¾ mi. + coll. 9 more birds! They were nearly as common as Sierra chaparral. They were responsive to pishing + squeaking. They did not seem restricted to as precise a micro habitat as they did at 9000-9400 ft. They were on ~~dry~~ dry soils + out of dense willows to Rosa + Ribes + several perched over brush or willow snags. The birds coll. came from these types of habitats.

R.M. Zink
1979

Fox Sparrow

Trail Canyon, 8300-8500ft, Esmeralda Co. Nevada

8 July

In early a.m. heard no ♂♂, despite the large #s yesterday. I did see a bird I cringed yesterday but it was far too fast for me to catch. In ~~evening~~ ^{afternoon}, saw a ♀ (prob.) foraging in mud along creek + feeding a fledgling. In evening, squeaked another juv. into an older snag, where it was fed by a parent. The juv. sat mostly still + seemed very attentive to my sound presence - but it lacked much caution. I was able to squeak it into view several times.

9 July

Heard 1-2 males + recorded one. The habitat at this elev. in Trail Canyon is basically riparian - large water birch + willows + alder plus (ground) understory of Rosa + Ribes + some nettles. Sound impressed me as different than Sierra chaparral birds. There are probably vocal differences of taxonomic/systematic value but one would have to be in Trail Canyon much earlier in year to make efficient use of time as at this site there are few singing. Perhaps if they're double-brooded there will be another period of intense singing. We banded 2 juvs. this a.m. + Kangatyped them at Coal Lake in p.m.

~11 mi. W Benton, 8500ft, Mono Co., Calif.

11 July

I was awakened this a.m. at 8:00 by a singing ♂. I tried to collect it but it was too shy.

R. M. Zink

1979

Fox Sparrow

- 11th July ~ 11 mi. W Benton, 8520 ft., Mono Co., Calif.
- The habitat here is 1st Populus tremuloides. The Fox sp.s (3, in all) are mainly in ^{an} ~~the~~ area of higher aspen (~ 25 ft) w/ an understory of young 3-6 ft. aspen. There is some wet ground in the ^(incl. small stream) immediate vicinity. In the a.m. I drove to San J. will meadow & beyond (see journal) & heard 0 Fox sp. However, I was searching sagebrush - Mt. Mahogany & they are apparently only in riparian situations at this local. I had mistakenly read Linsdale (1978) to say that monensis was in manzanita-sagebrush. I have driven 25 mi. up here & seen about 4-5 manzanita Oges - prob. restricted in this area to Populus around stream & springs. The ♂ (prob. of RMZ 1083) continued to sing in evening of 11th & I squeaked it to 4 in a few m but the shell was a dud. Searched ~ 2 hr. morning of 13th & heard or saw nothing of ♂ heard previously.

- 14 July Lee Vining Canyon, Mono Co., Calif.
- After searching around Walker Lk., Parker C. (got into Wilkersons Area - no shooting) & Grant Lake, was ready to head N to Woodford, as I found essentially 0 habitat (Ceanothus + sage & Mt. Mahogany). David Gaines told me he sees birds in Lee Vining Canyon above Aspen Campground. We drove up night of 13th. On 14th, hunted 2 areas consisting of

R.M. Zink
1979

Fox Sparrow

Lee Vining Canyon, Mono Co. Calif.

14 July (cont'd) Ceanothus, Rubus & Prunus plus some sage & Mt. Mahogany. There's v. little (if any) antelope bush in immed. vicinity. There's also stands of Populus tremuloides (incl. patches of v. young (i.e. < 6') growth) & Pines & fir. The sparrows were mainly in areas w/ some heterogeneity in brush species & perhaps an isolated tree (pine or mahogany) as singing perches. Most birds collected were in these areas. A couple were found in basically open forest at forest-brush edge - but the birds were w/in the aspen forest. These areas (see catalog) are between the road to campgrounds & Hwy (Lee Vining - Tioga Pass) & are accessible from road. They remind me of W slope brush fields (esp. the Ceanothus) & I did not see this obvious Fox Sp. habitat on my walk to Walker Lk. or on our drives above Grand Lk. & Virginia Creek. In early a.m. there were several (4+) ♂♂ singing - from conifers or mahogany. There did not seem to be the high densities of W slope chaparral. In general, it was my impression that if you are near a Fox Sp. (+ squeak/pink) it will respond, either by giving the "chink" call note or approaching or both. It seems to be better to just walk through likely habitat & let the birds respond. I was getting the impression that too much squeaking/pinking on my part was making the birds skittish. Also, some are past breeding condition &/or molting & don't respond as readily.

R. M. Zink
1979

Fox Sparrow

Lee Vining Canyon, Mono Co., Calif.

14 July ~~cont~~ However, the first time you encounter an individual (at ≤ 75 ft.), if you crouch + squeak it will usually respond. However, later (same or next day) that bird I think is more frightened by your approach noises. Males were heard singing both in a.m. + p.m., but more frequently in a.m.

15 July Hunted the area above Big Bend Campground (see sketch). The Prunus on this surfacing slope seems too dense +/or homogeneous. As the density of birds was seemingly lower however, in a.m. there was a fair bit of activity. Again noted they seemed to prefer areas w/ some vertical relief + brush spp. heterogeneity. Got into what might have been a family + ended up w/ 3 immatures. They were quite responsive to my squeaking + I couldn't really tell that they weren't adults.

3 mi. E Mineral Mtn, 8400 ft., Alpine Co., Calif.

15-17
July

Found Fox sp. in areas of tobacco brush + Ribes on hill tops. Drove in on rd. 4 of Walker (past old mine). Stopped at some brushy spots on way up but got no response - perhaps too low a wrong time of day. The ♂ sang occasionally + mostly in early a.m. I think a ♀ (km ± 1100) was possibly feeding a young chick but am unsure. The habitat w/ birds (Fox sp.) in this area is a top hills + seemingly no

R. M. Zink
1979

Fox Sparrow

3 mi. E Mineral Mtn., 8400ft., Alpine Co., Calif.

15-17 July
(cont.)

particular slope. I heard a ♂ sing from a Mt. Mahogany "forest" but noted most birds on a hillside w/ tobacco brush Ribes, Mahogany + scattered to clustered pines. In fact, the brush/pine interface was where I coll. several - they seem to respond to my squeaking, by going to a tree + watching. However, in general they seem (as usual) fairly tied to the brushy spots. Again I suspect at this time of year, it's best to walk through habitat until you see or hear a call note - then crouch + start squeaking.

18 July

Woodford's vicinity, ~6000ft., Alpine Co., Calif.

There are a good # of birds in the mangrove channel along the main Hwy. There is a fair deal of habitat, but much of it is close to the Hwy., or too steep on the canyon sides. The brush is composed of ^(1/3) mangrove, ^{50%} Ribes, 30% Ribes, open ground + patches of Prunus, plus a fair deal of ^{+ aspen + few Mt. Mahogany} pine + fir (from scattered to clumped). The birds seem most common in the larger patches of mangrove + conifer trees - so there is some vertical heterogeneity. This locality strikes me as quite similar to W slope habitats. Snags, dead limbs + live trees were used for perches. Some birds were coll. in brush + a Hirtler P in a Mt. Mahogany. In general, the birds seem commonest when there is brush sp. + vertical (i.e. perch) heterogeneity.

R.M. Zink
1979

Fox Sparrow

1/2 mi. W of Pickett Peak 2400m, Alpine Co. Calif.

P.M.
19-20 July

A good ^{size of} breeding population exists in this area. Basically, there is a belt of Tobacco brush, Ribes, Artemisia, ^{a little manzanita} of about 2400m that seems to extend all a part way around Pickett Peak. There are scattered to clumped patches of Populus tremuloides (^{clump of young trees forming dense thickets to older stands}), scattered Incense Cedar, ^(Lodgepole + Ponderosa) pines + firs. The birds are in a variety of places but what strikes me most is the # of trees. Often birds were call. w/ as little as 30% brush, others at/in open stands + st. (There is the larger distinct brush patches. In the a.m. of 20th, there were ~~43~~ 70+ heard singing & seemingly a high density of birds. There was more singing 0600-1200 than I've heard since June.

2 mi. N / 1/2 mi. W Duane Bliss Pk. 2130m, Douglas Co, Nevada

P.M. 21 + a.m. 22
July

Found birds fairly common in the brush patches (Arctostaphylos, Tobacco brush (Leaenanthus), Chingua (Ceanothus), serotinus) + Ribes) which are interspersed along the Kings Canyon Road (turn off from Hwy 50). There is everything from isolated bushes to rather extensive patches. There did not seem to be the densities that occur on W slope of Sierra Nevada however at this time, many adults are molting + rather shy. Also, I hunted for 1 hr. on night of 21 after it had rained all day + it was v. cold + nothing (to speak of) was moving - but did squeak out several birds (Foxg) + coll. 3. Again the occurrence of vertical relief (trees - ponderosa pines + fir) often a bird curious / concerned about your approach

R.M. Zink
1979

Fox Sparrow

2 mi. N, 1 mi. W Duane Bliss Pt., 2130m, Douglas Co. Nevada

p.m. 21 + a.m. 22
July (cont)

will ascend at least to lower branches to investigate. This is especially true, I think, of ♂♂. ♀♀ perhaps more often approach low, even on ground + at highest to tops of brush or low elev. branches.

Thus the habitat was rather a mosaic of brush + forest w/ the birds occurring 1° in the brushier spots. There seemed to be a threshold size of brushy spot for sparrows to occur. There were few singing ♂♂ + most sang in response to my presence @ squeaking/picking or @ imitated song. Song perches were typical, using outer portions of conifer branches, tops of brush or dead branches on trees. There were a few imm. around (coll. 1). We also found birds in the extensive brush patches on the E side of the mtn. which King Canyon Rd. circles (NE 48° 31' 7.15" N, R. 149° E) + most of the road until it drops to mostly sage + antelope bush. If future samples are needed, this locality could yield many more birds.

Sugar Hill vicinity, 1850m, Modoc Co. Calif.

24-27 July

Collected a total of 30 birds in two basic localities (see catalog). The birds were actually (probably) common, although often hard to approach - especially singing ♂♂. I coll. only 1 singing ♂ (RM 71156), but heard 10-15 others. They were fairly easy to "quest" into view once they were located + you approach close. The early a.m.

R.M. Zink
1979

Fox Sparrow
vicinity

Sugar Hill, 1850m, Modoc Co., Calif.

24-27 July
(cont'd)

seems to be best - birds most responsive + easy to approach (except singing ♂♂). I got to within easy 38 range of several singing ♂♂ but after 6-7 times I realized they were low in brush - or aware of my approach + orienting themselves on opposite side of tree + when I moved too much they took off. They seemed to be most common in areas of 20-40% trees ^{10-15% open + grass} (Pines especially) + 30-50% Tobacco bush. In fact, about 90% of the birds were in or under Tobacco bush. It was rather a different situation than the other runs - it was like a woodland w/ 4-5' brush understory. Coll. 3 immatures + saw only 1 other. I'm not sure this is breeding habitat - perhaps post-breeding birds disperse into these brushy areas. The singing ♂♂ I did hear sang early a.m. mostly - a couple sang later in day in response to my squeaking or presence. Song posts were pines + firs (seemingly $\leq 20'$) + some were low in leavedrops.

-30
29 July

Cedar Pass, 6000ft (=1830m), Modoc Co., Calif.

Coll. 2 birds in afternoon in the brushy hillsides S of Hwy 299. The slope is from 5-20% + there are some sizable patches of Tobacco bush, w/ Ribes, Prunus + Artemisia. I hunted evening of 29 + a.m. of 30th + only heard 1 other bird (p.m. of 29th) - despite lots of very good looking Fox Sparrow habitat. The

R. M. Zink
1979

Fox Sparrow

Cedar Pass, 1830n, Modoc Co. Calif.

29-30 July
(cont)

Birds collected were at the edge of a Prunus, Ribes patch + the ♂ was shot from lower branches of a Abies conifer at this edge. This area is probably worth checking out earlier in year.

Lassen Peak vicinity, Shasta Co. Calif.

31 July -
2 Aug.

See catalog for 2 basic localities + journals for habitat descriptions. In spite of coll. 26 birds in less than 48 hrs. they were generally shy + hard to approach. I heard 3-4 singing ♂♂ at 7800 ft. site + 5-6 at ^(5800') lower site (on 2 Aug.). In general, the birds sang 3-4 times + often the renditions were somewhat shaky. While many birds showed interest in my presence/squeaking they often approached on ground - many were seen at very close range in brush - some responding to me + others apparently just foraging/immune/unconcerned at my presence. Most birds were in heavy molt + this probably explains their shyness.

L. M. Zink
1979

Fox Sparrow

Shaver Lake vicinity, Fresno Co., Calif.

5-7 Oct.

See catalog for specific localities (2).
There seem to be fewer birds here than last year. The grayish specimens that I thought were resident juvs. finishing molt are possibly migrant immo. David Goul shot 2 schistacea. There were also many of the brownish fuliginosa-like specimens + a couple townsendi types. The birds were in general shy + not real responsive to squeaking, although you could generally get individuals to flock in tops of brush. The first morning (5th), I heard a ♂ singing a song similar to the breeding song - however, it was incomplete + only given 2-3 x's + probably by an immature. The Fox Sparrows seemed to avoid the flocks of other sparrows (Zonotrichia). They were perhaps ~~spaced~~ spaced in territories but that's uncertain. They seemed to be in the densest brush patches, especially in areas of more than 1 brush species. It was usually necessary to walk through the brush to get the bird out, as they weren't that responsive to squeaking. Saw 1 fuliginosa-type ascend over 30' in a Sugar Pine.

R.M. Zink

1979

Fox Sparrow

11-12 Dec.

Spent 2 days coll. w/ D. Good + S. Kaiser. There was a very high density of Fox Sparrows here. There were several races present. I noticed a definite call difference: Gray or "schistacea" forms gave a "chink" call + the brown or "unalascensis" gave a higher "seet" call. There appeared to be no evidence of flocking although sometimes several birds would co-respond to my squeaking. Others were seemingly paired or on territories. They were active at dawn (+ calling) + could be found easily throughout the day. Most birds were feeding on ground in typical fashion. They seemed to prefer brushy areas (3-8" w/ some scattered pines or near loose forest edge, or even just shrub/bush diversity (not homogeneous brush or forest).

R. M. Zink
1980

Fox Sparrow

San Bernardino Mtns. - see R.M.Z. catalogue for localities

29-30
May

I found a couple good colonies near Butler Plk., along VSPB roads (2W68). The first local., near Grey Campground, did not support large #s of birds. I heard a few singing ones but they were hard to approach. The brush was in small patches + consisted mainly of Ceanothus (white then leucodermis (?)). There were some Manzanita plants but only about $\frac{1}{4}$ as common as the Ceanothus. The Ribes, Salix (along streams) + Quercus had not leafed out. Fox Sp. singing from such oaks spooked easily as I approached. I was very discouraged as it seemed singing was at a low level (even for late afternoon) + that the birds were early in breeding cycle. They were not responsive to my fishing + I heard very few of the "chink" calls. I concluded either that it was too early or that this was marginal habitat.

On 30 May I moved further down 2W68 + encountered some more extensive stands of Manzanita (still some Ceanothus, Quercus, Ribes, Castanopsis). There seemed to be a much higher density of sparrows here + I coll. 10 in ~2 hr. To my surprise I found 3 recently fledged Fox Sp. I was sure, at 1st, that they must be Cowbirds or some other sp., as I had thought from yesterday that the

R.M. Zink
1980

Fox Sparrow

San Bernardino Mtns, 2200m, San Bernardino Co., Calif.

29-30
May
(cont.)

Birds were early in nesting cycle. I coll. one of the juveniles (RMZ 1449 + what I think must be both parents RMZ 1447-48). However, the birds were only somewhat easier to approach & more responsive. I think that they are definitely more wary in less dense brush (= marginal habitat).

31 May -
1 June

Upon USFS advice (about a 1/2 ge., high elev., brushfield) I drove to vicinity of Clark Summit. Here were some extensive brushfields on a somewhat steeply rolling old burn site. There was 0-35% open ground, 0-20% conifers (Pond. or Jeff. Pine, White Fir & Inc. Cedar (few)) + brush fields of Manzanita, Ceanothus & Chorizanthe. I could hear upwards of 6-8 ♂♂ singing at one time. I would consider this to be optimal Fox Sparrow habitat. I photographed the area on 1 June.

Black Butte (Glenn Co.) + Anthony Pl. (Mendocino Co.), Calif. - see catalog for localities

22-23
June

David Good, Susan Kaiser & I have spent 2 days hunting Fox Sp. The habitat is different here than anywhere else we collected. The brush patches are rather dispersed - thus so are the birds. At Telephone Campground we found ~8 birds in amazingly little brush. The birds were in young Pine (Abies concolor) & using taller trees

R.M. Zink
1980

Fox Sparrow

22-23

June

for singing perches. I was very surprised there were any birds here at all - because of the paucity of brush. Near Black Butte we found more brush (Prunus + low Ceanothus + Arctostaphylos) + a few more birds. As usual, in "marginal" habitat (= sparse), birds were relatively more wary. Males singing in Firs were hard to approach. There is not an abundance of singing - although the songs I've heard sound typical to negativus + stephensi. I'm at a loss to explain the presence of birds in firs w/ so little brush (some places) - most stomachs have contained sm. insects, mostly Coleopterans. I have seen no fledglings. The colony^(is) here is certainly less dense than others I've visited. Birds (♂♂) are using Firs (20-40+ ft) for singing perches. Susan Kaise + I both heard + watched a bird on ground (♂?) giving a soft warble-like call which sounded like a cross between a Cassin Finch + Fox Sparrow. Birds will cross large expanses of open ground to get to other Firs +/or brush.

8 mi. N, 6 mi. W of N Yolla Bolly Mtn, 1480m, Tehama Co, Calif.

24-25

June

We revisited the site I collected 30-31 July 1978. Then, I remember the birds in moderate density + hard to approach, although it was late in the season + they were molting. This year they are abundant. You can hear as many as 10 ♂♂ singing. The birds are easy to

R.M. Zink
1980

Fox Sparrow

8 mi. N, 6 mi. W No. Yolla Bolly Mtn. 1480m, Trinity Co., Calif.

24-26 June
(cont.)

approach + by squeaking as many as 6-8 are nearby at once. I noticed (again) that the "chink" call of the ♂ is louder than that of the ♀. The habitat here is rather patchy with brushy areas (see Journal) separated by open ground or trees. I would estimate the density of birds to be similar to Sagerhen or Lassen Plk. (~ 1 pair/acre).

On the evening of 25 June I listened to a "chorus" of 5-6 birds. They seemed to call in a sequence, some not to overlap. I was also interested in the pattern of singing; i.e. the occurrence of songs (in sequence) which end w/ buzz or "flicker note". There seemed to be some pattern but it would require some time. The songs I've heard seem typical + I've noticed a lot of individual variation - especially when 5+ birds are singing. Song perches included dead standing snags, Firs + pines.

By the morning of 26 June I'm quite sure that there were singing ♂♂ on territories where we collected resident ♂♂ the day before.

The density of birds on this 2 yr. old burn is really high. They utilize brush patches + stands of conifers + brushy understory.

Wildwood, 3500ft., Trinity Co., Calif.

26 June

I was very surprised today to hear 3 singing ♂♂ here. One bird sang from a telephone line over a path

R.M. Zink
1980

Fox Sparrow

Wildwood, 3500 ft., Trinity Co., Calif.

26 June
(cont.)

of Salix (?) bordered by firs + pines. I couldn't see the other 2 individuals but they were definitely of this species.

26 June

3 mi. E by road of Wildwood, 3000 ft., Shasta Co., Calif.

A ♂ was singing on a brushy hillside at ~ 11:00 a.m. David Good saw 2 birds + shot at, but missed, a singing male. I was extremely surprised to find these birds at this elevation & habitat (see S. Kaiser Journal for habitat notes). The habitat was basically low elev. chaparral of montano, Bl.-thr. Gray Warblers, Bl.-gc. Gnatcatchers, Sage Sparrows, etc. - hardly usual neighbors of ~~breeding~~ Fox Sparrows.

1/2 mi. S, 1 mi. W Scott Mtn Summit, 1620 m, Trinity Co., Calif.

27 June

We stopped here because there is extensive brush - and we heard a Fox Sparrow "clink". David Good, S. Kaiser + I spent 1 hr. hunting + none of us even saw a Fox Sparrow, I heard 3 singing ♂♂ in distance. The lack of Fox Sparrows was amazing considering the habitat was as ideal as any I've seen. Upon finding that we all had no luck finding birds, we began to examine more closely the brush spp. present. The dominant (~80%) species was what we think is Coffa (Rhamnus sp.). Even though we hunted at

R.M. Zink
1980

Fox Sparrow

2 mi. S, 1 mi. W Scott Mtn. summit, 1620m, Trinity Co., Calif.

27 June
(cont.)

midday, we should have found sparrows. Especially since some of the brush patches were perfect looking. Thus, we concluded that Coffeeberry (or whatever) was not conducive to Fox Sparrows - or at least they are present in low numbers, perhaps where the manzanita is denser.

Sawyers Bar vicinity, Siskiyou Co., Calif. (see catalogue)

28-29
June

In the scattered brush patches (see journal) of this hilly area we found low densities of Fox Sparrows. I noticed very little singing, even little "chinking". The birds were in general very skittish + barely responded to squeaking + p'king. I was thoroughly surprised to find so few Fox Sparrows in such ideal-looking habitat. I have pondered reasons for the paucity of birds. I have noticed in the past that brush heterogeneity seems to be prerequisite to high densities. There were several brush spp. here but apparently not the correct composition. Or perhaps the climate, soil, +? are not ^{conducive} to high Fox Sp. densities. Songs I did hear seemed typical.

The "inconspicuousness" of birds seem to occur when there's a (low) density below a level sufficient for some sort of social facilitation - when there are few birds they are very skittish.

The birds here sang infrequently - but when they sang on a few mts. I also noticed that ~~territory~~ ^{territory} were about 4x what I call normal - I watched several ♂ fly 75 ~~to~~ yds. to new song perches.

R. M. Zink
1980

Fox Sparrow

~3 mi. W Pyramid Pk., Siskiyou Co., Calif. (see catalogue)

30 June -

1 July

We coll. a series of 16 Fox Sparrows from the ~~dense~~ brush at these sites. Again, densities seemed low, territories quite large + singing rather infrequent. The brush is tall ($\leq 2\frac{1}{2}$ m) + forms dense, nearly impenetrable chaparral - unlike Sierra Nevada montane chaparral. Males sang from tops of firs, ranging in height from 15 - 35 ft.; one ♂ was singing from a 60+ ft. fir.

This seemed to be a place where the ♀s were too rough such that there was not the usual responsiveness to my squeaking + pushing. I found ♂♂ hard to approach.

Songs seemed like the typically widely varying repetitions.

Mt. Shasta vicinity, Siskiyou Co., Calif.

2-4 July

We found Fox Sp. at 2 sites (see catalogue). The lower site (see journal for hab.) had a sparse population. Territories seemed large + singing was infrequent - pairs were rather spread out (prob. a function of the habitat). There were an abundance of song perches - I think the prob. was that the habitat was too sparse/patchy to support very large #s.

On evening of 2 July, I shot a pair of Fox Sp. On a.m. of 3 July, I heard begging calls of young Fox Sparrows. David Good found the nest. It was about 12 inches off the ground + in the base of a dead manzanita right next to a young Ponderosa pine. It was constructed

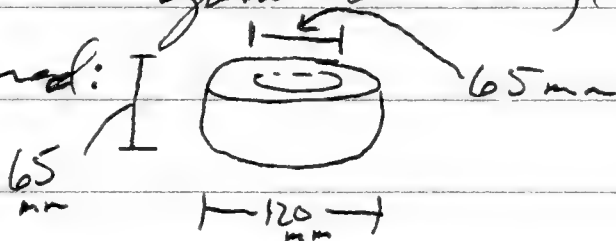
R.M. Zink
1980

Fox Sparrow

Mt. Shasta vicinity, Siskiyou Co. Calif.

2-4 July
(cont.)

of rather coarse sticks on outside (= diameter) + there was not too much of a finer grass lining. There were some other dead manzanitas nearby (1+ feet). The nest ~~was~~ measured:



There were 3 young in the nest. I kept 1 alive to observe.

We did note that some of the singing ~~or~~ seemed to sing a Coosin-finn-like song.

The next site (2050m) was more typical - an extensive brushfield of Leurothoe velutina + manzanita - and the birds were very common. This brushfield is about $\frac{1}{2}$ mi. x $\frac{1}{2}$ mi. (see journal for further description) and you have a great view of Mt. Shasta from it. I think it a relatively recent (≤ 10 yrs) burn - there are some (≤ 20) standing snags + a few pine trees. The area seems to be very windswept (at least the short time we were here). During windy periods, birds were hard to approach. They sang from tops of brush ($\leq 1\frac{1}{2}$ m) to snags from 5-30 ft. The birds seemed wary at some times + very responsive at others. I squeaked some ~~or~~ in from 50 yds and better. Territories seemed ~~rather small~~ "normal" for such a brushfield, $\sim 50 \times 50$ yds (average - perhaps too small). I did not see any fledglings. Birds seemed to be foraging on grubs as usual.

R. M. Zink
1980

Fox Sparrow

Spencer Creek, 1230m, Klamath Co. Oregon

5-7 July

On Ned Johnson's advice I visited the willow thickets along Spencer Cr. I found Fox Sparrows here in good numbers. On the evening of 5 July, we heard 2 ♂♂ singing. On 6 July, I call. 4 ♂♂ + 1 ♀ in the a.m. + 1 ♂ + 1 ♀ in the p.m. I simply moved ^{among} ~~from~~ areas of dense willows + concealed myself + squeaked / pished + gave owl (pygmy-like) calls. This attracted many birds incl. Fox Sparrows. I was surprised to be able to call in even singing ♂♂. Usually I only call in singing ♂♂ 30-40%, but here by getting out of site + squeaking I got nearly all singing ♂♂ to come in very close. I observed ♂♂ singing from dead fir snags + from willows. They seemed reluctant, however, to leave the dense willows, they did come to edges quite frequently. Songs seemed typical of songs I've heard elsewhere. Singing was not real frequent.

The most unusual aspect of this site is that the birds were in Salix thickets - but this is not to be unexpected as willow thickets are inhabited when available. Gabrielson + Dewitt note that Fulcr is a "common + characteristic bird inhabitant of the Ceanothus thickets of the Yellow-pine belt" (p. 589). Thus, it will be interesting to discover, sometime in future, if Fox Sp. breed in such brush patches near Spencer Cr. This could simply be opportunistic breeding + not indicative of Great Basin (i.e. willow breeding) affinities.

R. M. Zink
1980

Fox Sparrow

Spencer Cr., 1235 m, Klamath Co., Oregon

5-7 July
(cont.)

I ~~also~~ coll. 2 fledged young; adults were def. past laying (of course I only examined 3 ♀♀).

~~Odell Butte~~ Mt. McLaughlin vicinity, Jackson Co., Oregon

9-10 July

We coll. Fox Sparrows at 2 locals (see Journal + catalogue). The birds were in brushy areas, dominated by Tobacco Bush (Ceanothus velutinus - or similar) which was blooming. There were other brushy sp. but birds seemed densest in Tobacco Bush $\leq 1\frac{1}{2}$ m + 60-80% w/ standing sage or young conifers.

We hunted the 1st locality from 1030-1200 but still got 7 birds. There was some singing, but not much. I watched one bird (prob. ♀) fly up from base of a bush + hawk an insect + return to brush. Songs seemed "typical".

I was surprised by the densities at the 2nd site. The field was not large but there were at least 15 pairs of Fox Sparrows. They were responsive + did a fair bit of singing. David Good got a fledgling + a ♀ had a yolked egg - prob. 2nd breeding - this could account for some of the singing.

Odell Butte, 1580 m, Klamath Co., Oregon

11 July

We got 16 birds in 3 hr. this a.m. The birds were in Tobacco bush (flowering, $\leq 1\frac{1}{2}$ m, 30-80%) along USFS rd. 2421, 1 mi. S + $\frac{1}{4}$ mi. E of Odell Butte. There was a

R.M. Zink
1980

Fox Sparrow

Ocell Butte, 1580m, Klamath Co., Oregon

11 July
(cont.)

fair amt. of singing - a couple ♂♂ had songs w/ a phrase repeated in the middle - a variant I don't recall hearing elsewhere. Song perches were young pines, standing snags, etc. Birds were quite responsive + quite dense.

13 July

Steens Mtn., Harney Co., Oregon (see catalogue)

We found Fox Sparrows along streams in dense willows. They were very responsive to squeaking + came in close. They seemed restricted to areas of dense willows ($\leq 1\frac{1}{2}$ m) w/ occasionally some *Populus tremuloides*; the ground was mostly wet, w/ a few ^{+ some agaves, much} annual flowers + some grass.

Vocalizations were peculiar here. Songs lacked the sharp melodic rising of Calif. birds + was less clear in tonal quality. ^[also infrequent - but we heard it at mid-day + morning] Also of interest was that, to my experience, the birds do not "chink", but rather give a "chick" - more reminiscent of White-crowned Sparrows. The call note had a harsh, woody quality.

One bird in particular was of great interest. It had coll. 2 birds w/in 30m of each other + near Jackson Park. A third ♂ began singing from a perch mid-way up in willows. I tried for about 8 min. to coll. the bird. It continually came in close but carefully stayed out of sight. I had given up + walked away, gave an owl whistle + it

Zink, R. M.

1980

Journal

Calif.

Oregon

Nevada

R. M. Zink
1980

Journal

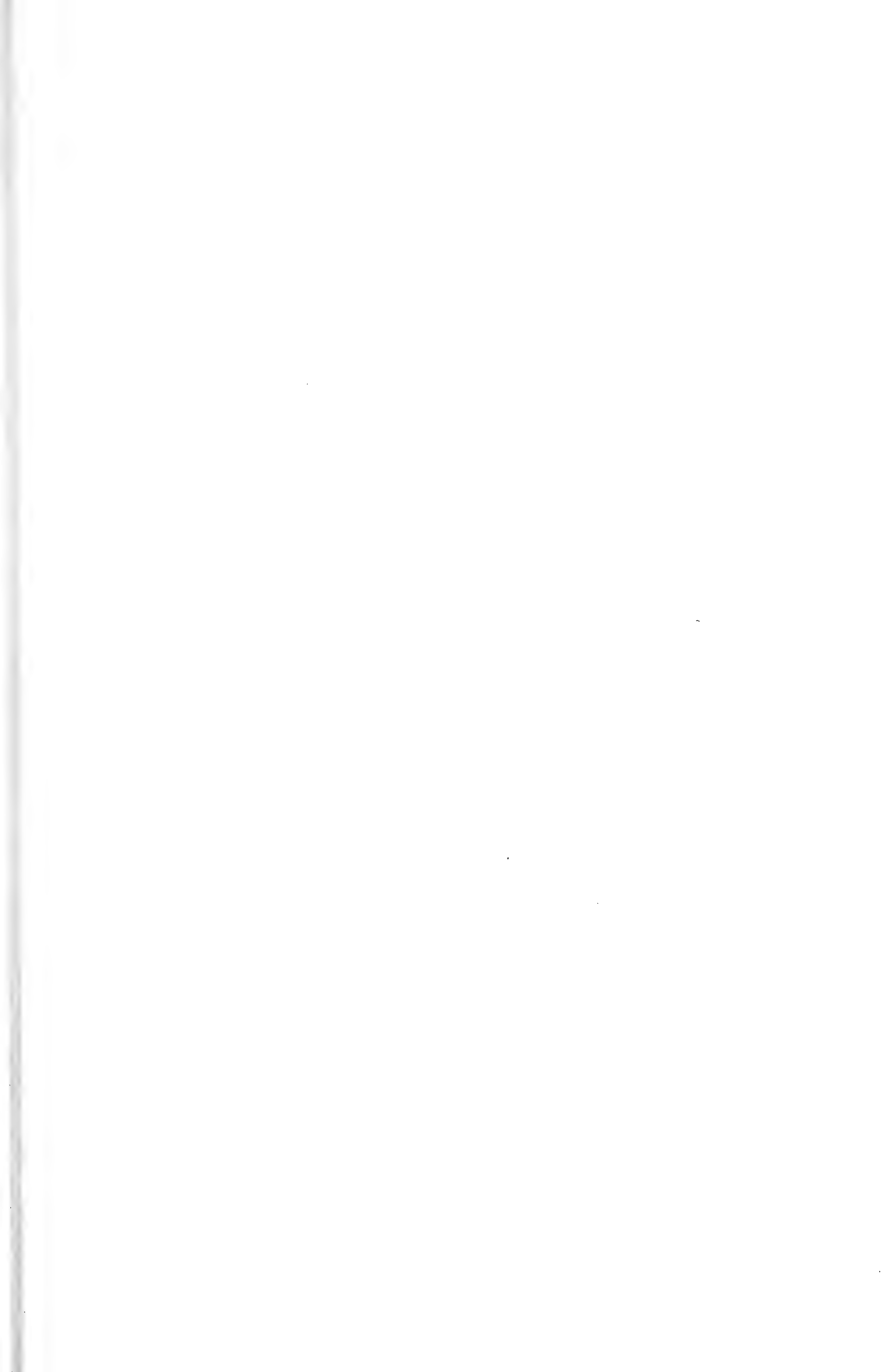
Berkeley - San Bernardino Mtns., California

28 May

Departed MVZ ~4:30 p.m. & drove S on 5 to cutoff to 99 (above Bakersfield), took 58 E out of Bakersfield. Spent night along Hwy.

29 May

Continued E to Boron & then drove S to Cajon Pass. Headed E on 138 into Nat. Forest & stopped at 1st USFS Ranger Station. There I was told that habitat I was looking for (Fox sparrows - chaparral 7500' ft) was prob. on Bear Valley side, so I drove back down & went to Lucerne Valley on desert side & then made the steep ascent to Big Bear Lake (this seeming long way around was by recommendation of USFS - I'd try going through on (18) next time). At Big Bear R.S. I talked to Linda _____ who suggested I try near Butler Pk. Many of the old localities are tough to get to now because of snow/mud (Sugarloaf) or w/in no shooting areas (Bluff Lake). Drove to Fawnskin & took 2068 to just past Grey's (USFS) camp-ground. I stopped here & spent rest of day collecting. See catalogue for locality. The area consists of open areas & small patches of brush, mostly 1m Canothus _____ (Buckthorn) with some manzanita (Arctostaphylos sp.). There are several conifer spp., incl. Pinus (Jeff. or borderosa), fir & some incense cedar - but nothing denser than what I'd



R.M. Zink
1980

Journal

San Bernardino Mtns., ~2200m, vicinity of
Butler Pk., San Bernardino Co., Calif. See RMZ catalogue.

29 May

Call woodland. There are also Ribes + Quercus,
neither of which have leafed out yet; Salix
along streams haven't leafed-out either. Thus,
there is lots of open ground (some Squam
Cargot - Ceanothus p) + not much in
the way of cont^s brush stands. In fact, I
can't recall a patch of brush larger than
25 x 25m. Soil is coarse, dk. gray to sandy, +
seems fairly moist. Streams are running although
the only snow is about 800ft⁺. The topography is
somewhat rolling w/ lots of hills + valleys. Weather
cool (~55°F), clear to pt. cloudy.

30 May.

Drove further along 2N68 (USFS) + found a
pretty fair area of Arctostaphylos; from 10-70%,
1-1½m, interspersed w/ Quercus, Pinus + Abies. I
collected 10 birds here in 2 hr. The rest of the
vegetation is similar to that described above.
In late afternoon I set out to find a similar
area to set up some nets. I cont. along 2N68
unt. I came to a muddy + fairly steep ascent - I
decided to turn back. There were no other
extensive patches of brush around. I drove back
to 3N14 + drove to Fawnskin Valley + tried to go
down 2N13 towards Butler Pk. - it was closed
off. There's a fair bit of manganita (+ Singing Fox
Sparrow) at jxn. 2N13/3N14 but it's w/in the no



R.M. Zink
1980

Journal

San Bernardino Mtns., 2200m, vicinity of Butler Pk., San Bernardino Co., Calif.

30 May
(cont.)

Shooting area. I drove back to Fawnskin + went W on 38 to 18 + cont. W, looking for suitable habitat on the S side of Butler Pk. There is some but it's high + very steep. I turned around as the road descended. I also drove down 2N15 off of 18 S of Butler Pk. but no good. I then took 18 on S shore of Big Bear Lk. I turned S near Coldbrook Campground + went up 2N10 - muddy roads prevented passage. I continued on 18 to Moonridge + tried other end of 2N10 w/ same result - too muddy. I was hoping to get to Summit Drive as it passes (on W end) Bluff Lk. - an old Fox Sp. coll. site. I returned to 18 + got on 38 hoping to get near Sugarloaf - another coll. locality. Sugarloaf is still snow covered. I drove past Onyx summit (8445 ft.) + headed W to turn off on 2N93 + spent night along creek. Quite cold at 8²⁰⁰ ft. The habitat apparently required by Fox Sparrows is not abundant - or at least it's not accessible at this early date. The montane chaparral seems to occur in certain situations. Along Hwy 38 there was scrub but of Mt. Mahogany + sagebrush (or something resembling) - thus the desert influence. It stands to reason then, that Fox Sp. occurrence will be in fairly isolated colonies - some of which, at high elevations, may not be occupied until mid-June + (?).

R.M. Zink

1980

Journal

San Bernardino Mtns., 2200m, San Bernardino Co., Calif

31 May

Decided not to go N on 2N93 + instead headed back through Onyx Pass to Big Bear. (The H₂O in the canister froze!). Stopped at USFS again + inquired about addl. localities. I was told that the Clarke Summit area contained the largest brushfields on the district. I explained I'd been unable to get there yesterday + was told of an alternate route - not on USFS map! You go S on Knickerbocker Rd., just past an old wooden (log) "mansion" + go left on a dirt road - 2N08. This winds up + up, is fairly steep + bumpy + finally connects with 2N10 near Clarke Summit. I parked 1/4 mi. from jxn. as there was a bad spot in road. This is indeed a large brushfield - prob. 1-3 mi.². It's fairly steep, but there is extensive brush (*Arctostaphylos* sp. *Leurothoe* [white thorn or Black-thorn], + *Castanopsis*). There are isolated Pines (Sugar, Jeffrey/Ponderosa) + firs and some stands. There are numerous large boulders + bare areas. But the brush is up to 100% ; 1-1 1/2 m high. I coll. a total of 10 birds here (incl. 3 on way up). I set up 3 short (6m) nets in afternoon + chased a ♂ Fox Sp. into one. Towards dusk I called in a pair of Great Horned Owls, directly overhead. The diff. in pitch between the sexes was marked. Also saw a couple Common Nighthawks.

R.M. Zink
1980

Journal

San Bernardino Mtns., ~2200m, San Bernardino Co., Calif.
29 May - 1 June

Bird list - San Bernardino Mtns. [T. 2N, R. 1W,
unless otherwise noted*]:

see R.M.Z.
catalogue
for locations

Turkey Vulture - 5 - near Lucerne Valley*

Cooper Hawk 1 - open conifer forest near Butler Pt.
on top of pine

Red-tailed Hawk 1 near Sugarloaf* (E side)

Mt. Quail 20 calling frequently

Killdeer 1 near Lucerne Valley*

Band-tailed Pigeon 10 overhead, heard 1 call

Great Horned Owl 2 ♂+♀ - called in on 31 May

Common Nighthawk 2 overhead

Black Swift 1 below Big Bear Lake*

unid. hummer 1 ♀ in brush at 8200 ft.

Common Flicker 4 snags, ground

Acan Woodpecker 2 "

Picoides sp. 2 heard

West. Wood Pewee 10-15 woodland-brush, calling

Empidonax 2 prob. Dusky or Hammond's - heard
call note "chun-up" - or close

Olive-sided Fly 3 heard - surprisingly infrequent

Horned Lark 4 Lucerne Valley*

Violet Green Swallow 40 Big Bear Lk. + near Sugarloaf*

Stellar Jay 10 usual

Common Raven 6

Clark Nutcracker 12 on 31 May - see catalogue for
local

R.M. Zink
1980

Journal

San Bernardino Mtns, 2200m, San Bernardino Co, Calif.

29 May -
1 Sun
(cont.)

Mountain Chickadee 20+ V. common, many in pairs
*noticed 3 note call - - -, that
I hadn't heard previously

White-br. Nuthatch 5-10 on lgc. pines

Pygmy " 2 " "

Brown Creeper 2 " "

Robin 10 singing, on ground

Western Bluebird 10 open woods

Townsend Solitaire 5 " " , calling

Mac Gillivray Warbler 2 brush

~~Brewer Blackbird~~ 20 Big Bear Lake
Brown-h. Cowbird 15-20 open woods, scrub

Western Tanager 4+ open woods

Cassin Finch 20+ " " , on ground

Pine Siskin 2 open conif. woods

Green tailed Towhee 15 singing, brush

Rufous-sided Towhee 12+ " "

Dark-eyed Junco 15 brush, open woods

Fox Sparrow 40 " "

[Cont. 50 Big Bear Lake]

It should be noted that I was looking
primarily for Fox Sp. so I undoubtedly missed
some species. The numbers reported are only relative
#s as I spent much time working on specimens.

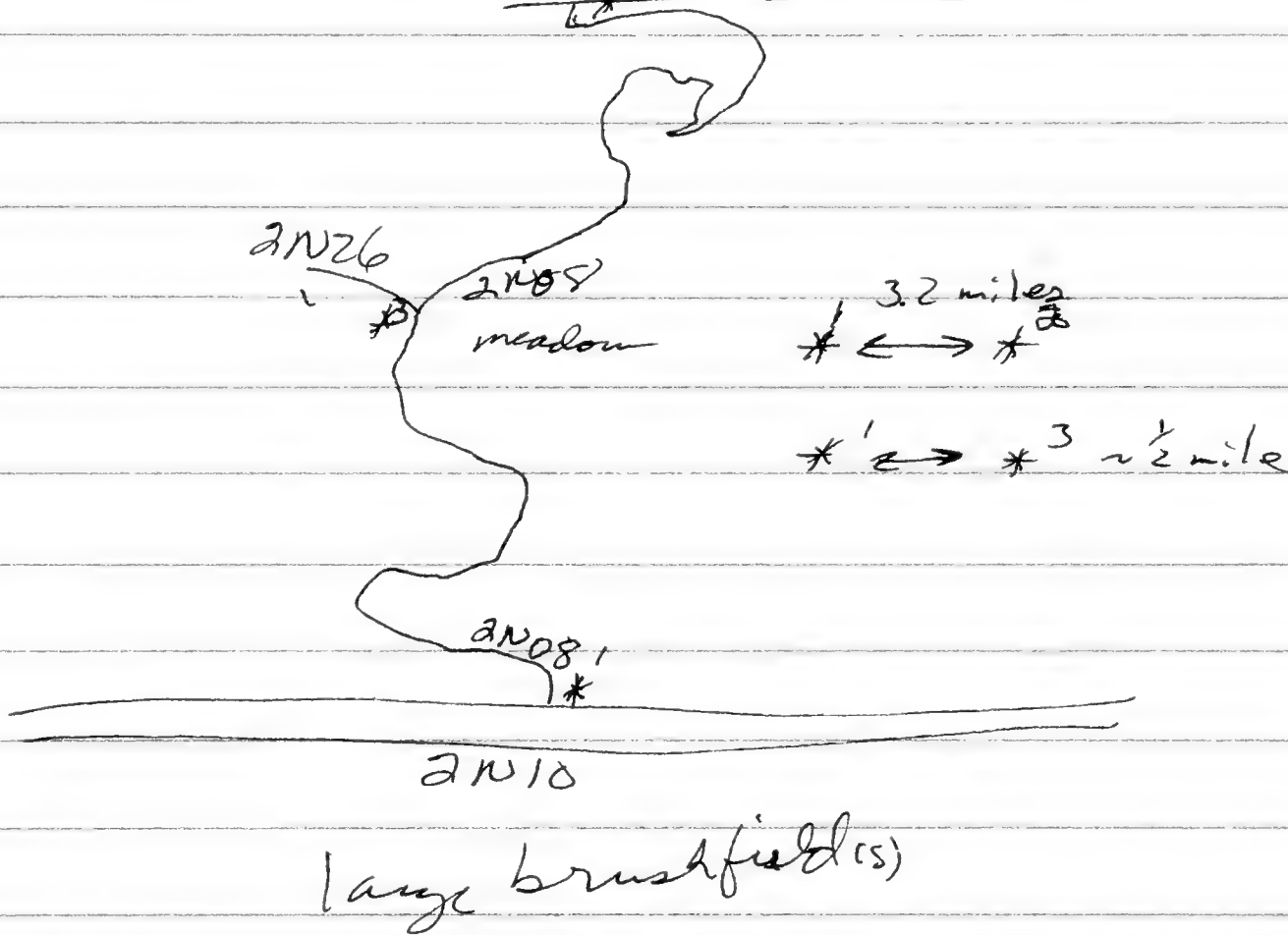
R. M. Zink
1980

Journal

San Bernardino Mtns, 2700m, San Bernardino Co., Calif.

1 June

Took some photos of area + took down
nets. Caught: 2 Mt. Chickadee, 1 Gr. t. Towhee, 1 White-br.
Nuthatch + 3 Fox Sparrows. I coll. a Clark Nutcracker
at camp. I left my camp site at 0930. The road
(2N08) is not on forest service map. The local. was:
Knickerbocker road
6.2



Drove to San Bernardino - Bakersfield - MOZ.
Arrived 9:00 p.m.

R. M. Zink

1980

Journal

MVZ to vicinity of Black Butte (Glenn Co., Calif.)

21 June

Left MVZ with Susan Kaiser & David Good & headed N to Willows (on Hwy. 5). Turned W on 162 to Elk Cr. + N to (F.H. 7) Alder Springs. I was looking for a Fox Sp. coll. locality in the Southern N Coast Ranges. Old localities (Grinnell + M. H. 1944; specimens) included Black Butte, Hull Mtn., Mt. Sanhedrin. We continued on F.H. 7 to "Telephone Campground" where we spent night.

22 June

We ~~at~~ awoke at 0530 to song of Fox Sp. We hunted this area (Tel. Camp.) in the a.m. (see catalog for localities) + got a few Fox Sp. + Mt. Chickadee. The habitat was mainly White Fir (Abies concolor) of varying densities + ages. ^{(0-100%, lots bare ground).} The soil is gravelly + there are lots of small rocks. There is very little brush (Prunus sp. (emarginata?), some low Ceanothus + Arctostaphylos). We drove back (E) along F.H. 7 to turnoff to Black Butte. Here we found more firs + some larger patches of Prunus, Ceanothus + Arctostaphylos, plus lots of open ground, shale (exposed) outcroppings, meadows of grass + Corn Lily. There are numerous small streams carrying run-off from remaining snow. From Bl. Butte we headed W again on F.H. 7 (towards Mendocino Pass), hoping to find more extensive brushfields + instead, immediately W of Tel. Campground, we encountered dense stands of Mt. Mahogany + lower elevs.

R.M. Zink
1980

Journal

(6400 ft.)

Black Butte & Anthony Pk., Mendocino Co., Calif.

22 June

I also planned to stop at Low Gap R.S., but it was shut down (i.e. defunct). I decided that we were quickly getting out of Fox Sp. - like habitat, so we went N on rd. M4 to Wells Campground & then headed up rd. to Anthony Pk. (see catalogue for local). Here we again found coarse granule soil w/ lots of fire, open ground, some patches of brush, some rocky outcrops & sm. streams. Here we found Fox Sparrows in fairly good numbers - scattered but present. The most extensive brush patches (50m x 50m or so) consisted of Prunus, 1-2m, which was just leafing out. There was some Ceanothus (mostly low & not dense) & Arctostaphylos ($\leq \frac{1}{2}$ m) - surprising low & Ribes (also not leafed out). There is some Salix along the stream. The most impressive thing is the lack of ground vegetation & very coarse rocky soil, dry (+ windy). It almost appears as though someone (USFS?) once poisoned the brush & then the topsoil was lost because of erosion. However, the old accounts mention stands of Prunus so perhaps this is typical. The fire range from seedling to stately mature trees & in density, from 0 to fairly dense stands. The brush patches are interspersed. See S. Kaiser Journal for further details. We all hunted today & spent night at $\frac{1}{4}$ m. E of Anthony Pk.

23 June

R.M. Zink

1980

Journal

Black Butte & Anthony Pk. vicinity, Mendocino Co. Calif.

23 June

Bird list 22-23 June (Kaiser, Good, Zink)

cont.

Turkey Vulture 1 overhead at Anthony Pk.

Kestrel 1 Low Gap R.S.

Mt. Quail 4-5 brushy areas, & calling

Allen(?) Hummer 2+ " "

→ Band-tailed Pigeon 3
Common Flicker 4 lge. stands / snags

Red-br. Sapsucker 1 Fir

White-headed Voodp. (?) 1 Fir. (RMZ).

Empidonax 5-10 brush / sn. Firs. Call / song
a buzzy pe-wit; birds tail-wag
for 2 x after perching.

Olive-s. Fly 5-8 Firs.

Stellar Jay 6 "

Raven 6 overhead

Mt. Chickadee 30+ Firs (see D.A. Good notes).

Red-br. Nuthatch 10+ " (RMZ saw 1 w/ little
if any red on breast)

Brown Creeper 2+ heard RMZ

Robin 6-10 open meadows

Hermit Thrush 4+ singing in dense Firs

West. Bluebird 1 meadow at Telc. camp.

Golden-cr. Kinglet 2+ Firs

Solitary Vireo 1 oak woodland / Mt. Knappton
singing just below Low Gap R.S.

Yell.-r. Warbler 10+ Firs, singing, gathering nesting
materials

Bru. h. Cowbird 4+ Telc. camp ground

R.M. Zink
1980

Journal

23 June
(Cont.)

Cassin Finch 10 tops of Firs
Lesser Goldfinch 2-3 overhead
Green-t. Towhee 3-4 brush (much less common
than Fox Sp.)
Rufous-s. Towhee 1 brush below Anthony Plk.
Lark Sp. 6 low brush along rd. near Low
Gap R.S.
Dark-eyed Junco 20+ brush, singing
Chipping Sparrow 5 Firs
Fox Sp. 30 brush

Peromyscus maniculatus trapped 3, saw Sciurus griseus

We all spent day hunting + working on specimens.
The above list is relative, not absolute, and a
direct fun. of how much time we spent outside.

24 June.

Left vicinity of Anthony Plk. for the locality 8 mi. N,
6 mi. W of N Yolla Bolly Mtn., which I collected in late July
1978. We went W to Covello (through + down) mt.,
Mahogany + Oak woodlands, conifers too) + then N to
Ruff's Reservoir. The drive was very long + the road
curved continuously. We were mainly between 1-3000 ft. + in
habitats from chaparral (we tried 2x for Chamaea fasciata)
to woodland to coniferous forest (lge. Douglas Firs, Ponder-
osa Pines, +). We arrived at the site N + W of N Yolla
Bolly Mtns. around 5:00 pm. We set up 3 nets + caught
a juv. Vermivora celata, ad. Dendroica petechia, ad. Empidonax
obsoletus, + ad. Passerella iliaca. There is a large number

R.M. Zink
1980

Journal

8 mi. N, 6 mi. W N Yolla Bolly mtn., 1480m, Trinity Co., Calif.

24 June
(cont)

of Fox Sparrows; up to 6-8 singing ♂♂ can be heard at one time. Susan Kaiser coll. 2, including a partial albino (RMZ 1487) which I saved as a study skin. [This locality was the same one I visited on 31 July 1978].

25 June

Got up 0630 - cold morning w/ some fog + mist. The density of Fox Sparrows here is as high as any place I've visited. The habitat is a mosaic of various vegetation types on an old burn (1959). There are some fairly extensive patches of Ceanothus, Ribes, Arctostaphylos, Prunus, Alnus shrubs - in varying combinations + densities. The shrubs vary from $\frac{1}{2}$ to nearly 2 m. There's lots of downed timber + logs. The soil is dk. gray + rather fine, silty; there are a number of ^{small} rocks in the soil. There are some streams w/ Alnus bordering. Tree species include: Pinus ponderosa, Sugar Pine, Douglas Fir, Incense Cedar. There are a few large trees standing but no really large trunks.

We spent the day hunting (20 Fox Sp., 2 release, 2 eaten in net = 24), checking nets + working on specimens.

26 June

Checked net in a.m. I had 1 ♂ Chipping Sparrow + 2 Fox Sparrows. We packed the truck + went to Wildwood for breakfast. Then we went to a spot 3 mi. E of Wildwood on Hwy. 36 to a spot I was shown in July 1978 (a USFS worker thought she had

R.M. Zink
1980

Journal

26 June
(cont)

8 mi. N, 6 mi. W of N Yolla Bolly Mtn, 1480m, Trinity Co, Calif.
seen Fox Sparrows - so I knew the spot was for +
brushy. We spent afternoon + evening here
coll. invertebrates.

Bird list 25-26 June 8 mi. N, 6 mi. W N Yolla Bolly
Mtn.:

Sharp-shin. Hawk	2	overhead
Red-tailed "	1	"
Kestrel	1	"
Mt. Quail	5-10	brush, ♂♂ calling
Common Flicker	8+	snags, Firs + Pines
Red-br. Sapsucker	5+	" . DAG found a nest in a Fir (30ft.)
Hairy Woodpeck.	1	snag
White-h. Woodpeck.	2+	snags, DAG found a nest ♂ ² ft. in a dead snag.
Dusky Fly.	6+	brush, Netted 2 - one ♀ w/ active inc. patch.
Western Wood Pewee	5+	conifer stands
Olive-s. Fly.	5+	" "
Stellar Jay	3+	" "
Common Raven	4+	overhead
Mt. Chickadee	15-20	conifers
Brush Tit	1	netted a juv. (DAG catalogue) in brush/young firs
Red-br. Nuthatch	2+?	conifers
House Wren	1	S. Kaiser found a nest under bark of tree - 15 ft.
Robin	10	on ground, brush

R.M. Zink
1980

Journal

8 mi. N, 6 mi. W N Yolla Bolly Mtn., 1480 m, Trinity Co., Calif.

~~June 24~~
June
(Cont)

Western Bluebird 4⁺ shrubs w/ standing snags & trees

Orange-cr. Warbler ~~2~~ 1 netted 1 juv.

Nashville Warbler 4⁺ netted ad.

Yellow Warbler 4⁺ brush

Yellow-rumped Warbler 5 " , conifers

MacGillivray Warbler 4 brush

Brown-h. Creeper 3 conifers

Western Tanager 4⁺ "

Bl.-h. Grosbeak 1⁺? - RMZ heard 1 singing

Cassin Finch 4⁺

Green-t. Towhee 1⁺? netted 1 ad.

Rufous-s. Towhee 5⁺ brush

Dark-eyed Junco 5⁺ "

Chipping Sparrow 5⁺ " , conifers

Fox Sparrow 50⁺ brush sm. conifers. See spec.

This area is part of a large burn (1959). Our nets were near brushy patches w/ interspersed young pines & firs. There are some (planted) stands of conifers as well as some older stands (prob. fire). There are open areas w/ some annual plants & grasses.

— The spot where we collected Wrentits was at 3000 ft. I heard a Fox Sparrow sing here!! Also I heard 3 separate ♂♂ at Wildwood (see spec. acct.). There is a park area 3 mi. E of Wildwood consisting of manzanita, Oaks & Bigge Pines. At this

R.M. Zink
1980

Journal

3 mi. E of Wildwood, 3000 ft., 3 Shasta Co. Calif.
site we saw a # of different birds (see S. Kaiser Journal)
because of the lower elevation.

We drove to ^{near} Weaverville + spent night.

27 June

We drove N on 3 along Clear Lake.
Above the lake we climbed (the road that is) to
5000 ft. Here we encountered lots of brush
interspersed w/ conifers. It looked eddy
for Fox Sparrows. Sam, David + I hunted for
an hr. + didn't see a single bird! However, I
heard **3** Fox Sparrows sing + another "chink".
I could not believe there were no Fox Sparrows
here - or at least so few. We determined that
the dominant brush sp. was (?) Rhamnus (copperberry)
w/ some Arctostaphylos patula (?). There is sufficient
brush here that I would have predicted high Fox
Sparrow densities. In spite of the fact that we
hunted at noon, I'm confident that we'd have
encountered a few birds.

We drove to Callahan + got some info at USFS
station. I decided to drive N to Etna + then go
SW to Etna ~~Summit~~ Summit + to Sawyers Bar. We
found little if any suitable montane chaparral
along the steep + windy road to Sawyers Bar.
At Sawyers Bar I asked for info about the area
at a bait shop. The guy in charge had a
few ideas but suggested I talk to Doug Andrews.

R.M. Zink
1980

Journal

Sawyers Bar vicinity, Siskiyou Co., Calif.

27 June
(cont.)

of the USFS, The R.S. was closed but the man in the bait shop called Doug he met us at the R.S. He had a number of ideas where we could find montane brushfields that weren't too steep (much of this area is very steep). We drove to one of these areas: near Idlevild Campground a road branches off the main road + goes to Music Creek (or Russian Creek). The road is pretty good but we had to go a long way to find the brushfields Doug was referring to. We parked at Music Creek + spent night (see catalogue for localities). Heard Bubo ^{virginianus} ~~major~~ during night.

28 June

Hunted around Music Creek in a.m. There are some brushfields of Chokecherry, Manzanita, Ribes, Castanopsis sempervirens + ?, interspersed w/ varying densities of conifers. The brush was 1-2 m high + dominated by the Chokecherry. Fox Sparrows were not common - I coll. 4 + 5. Kaiser got 2 D. Good coll. a Dipper, Townsend Solitaire. We took 13 subs.

Next we drove to end of rd, where we encountered some large brushfields in an old clear-cut site. We spent hot part of afternoon working on the a.m. specimens.

R.M. Zink
1980

Journal

Sawyers Bar vicinity, Siskiyou Co., Cal. (see RMZ catalogue)

28 June
(cont.)

I hunted in evening in the dense brush fields. I was continually surprised to find so few Fox Sparrows + such ideal looking habitat. The terrain is fairly steep, there's lots of standing + fallen snags + dense brush. The brush ^{esp.} include: Arctostaphylos, Ribes, Dogwood (dominant) ^{PRSB. 7000' CO Bush} Ceanothus velutinus, Prunus, Alnus ^{+ Salix} (along stream) + Castanopsis. The cover varied from 10-100% + height from $\frac{1}{2}$ to $2\frac{1}{4}$ m. There were some stands of fir + pines as well as interspersed trees. The soil was grayish + rather coarse, slightly powdery. There are rocks that range in size from a few in. to $1\frac{1}{2}$ ft. in diameter but no (or v. few) large boulders.

We camped near end of road.

29 June.

We hunted the brushfields in the a.m. + got 6 Fox Sparrows (see sp. acct.). I found a Mt. Chickadee nest + showed David + Susan.

Bird list 27 (p.m.) to 29 a.m. June

Gr. Horned Owl 1 calling night of 27 B along trees bordering Music Creek (see catalog)

Rufous Hummingbird 50+ Very abundant; all over brush, singly + in groups - feeding on flowers of Ribes + Arctostaphylos (?). Very responsive to squeaking/pishing. There seemed to be greater % of ♀♀ (70%+)

Common Flicker 3+ snags

White-h. Woodpeck. 1 "

R.M. Zink
1980

Journal

Sawyers Bar vicinity, Siskiyou Co., Cal. (see catalog for local's)

29 June
(cont.)

Red-br. Sapsucker	3	snags - incl. drumming
West. Wood Pewee	5+	conifer trees, edges
Dusky Fly.	10+	brush
Stellar Jay	5	forest
Mtn. Chickadee	5+	" ^{conifer.} woodland
Common Bush Tit	6	brush
Brown Creeper	2	forest
Red-br. Nuthatch	2	forest
Dipper	1	along stream
Robin	10	
Hermit Thrush	2	forest
Townsend Sol. Tair.	2+	forest
Warbling Vireo	2+	brush/forest
Or. Crown. Warbler	4+	brush (singing ♂♂)
Nashville "	4+	"
Yellow-r. "	6+	forest
Cassin Finch	4+	forest
Green-t. Towhee	5+	brush (singing ♂♂)
Dark-eyed Junco	6+	"
Fox Sparrow	20+	"
Lincoln " (?)	1	Alum. thicket (Rm7).

I found Felis concolor scat in an area of sandy soil, brush + young scattered (25% cover) pines. Also found Deer scat.

We packed up and went to Adirwild Campground, then to Forks of Salmon, Siskiyou Bar, Happy Camp.

At Happy Camp R.S. I talked to a guy from the fire crew. He suggested a brushy area n/w of Happy

R. M. Zink
1980

Journal

29 June (cont.) ~6 mi. N of Happy Camp, ~1580m, Siskiyou Co., Calif.
Camp (see catalog for local). We bought supplies & headed N along the road. We "coll." a Crotalus viridis, which we later ate. The road goes y into forest & then broke into a brush patch. The road is pretty rough & you'd need a pickup to get through. Bear scat on road.

[we saw ~5 Great Blue Heron nests in tops of dead trees just N of Jones Bar - w/ birds present].

30 June Spent day at 1 mi. S, 3 mi. W Pyramid Pk. The area is quite steep but has extensive brush fields. There's a lot of Castanopsis, ^{+ Tobacco Bush (Ceanothus velutinus)} Arctostaphylos, scrub oak - all very dense & ~2m. On slopes (nearly all over) this makes passage very difficult. It was mostly clear, ~70° w/ a slight breeze. We got a total of 10 Fox Sparrows today.

1 July We moved closer to Oregon line (3½ mi. W Pyramid Pk.) and hunted brush patches, mainly along road. There are extensive brushfields but most are very steep & covered w/ dense 2m Ceanothus velutinus & Castanopsis sempervirens. The soil is coarse & grayish to grayish tan.

We drove back to Happy Camp from this side - it was 17 mi. to the main road out of Happy camp. We then drove E & S ^{+ Vally Quail} right near Seal Valley. Saw Kingfisher along Klamath R.

R.M. Zink
1980

Journal

Seiad Valley to Yreka to vicinity of Mt. Shasta,
Shasta Co., Calif.

~~2 July~~
1 July
cont.

Bird list for 29 June - 1 July

Turkey Vulture 2 high overhead

Accipiter striatus 1 ♀ RMZ squeaked in on 1st

Mt. Quail 4+ brush

Band-tailed Pigeon 5+ overhead

unid. Hummer 3 brush (prob. Anna?)

Common Flicker 5 forest, snags

Hairy Woodpecker? 1 heard s.k.

White-h. " 1 forest

Dusky Fly. 8+ brush

Olive-s. Fly 4 forest edge

Stellar Jay 6 "

Raven 2 overhead

Chestnut-backed Chickadee 1 coll. D.A. Good

Mt. Chickadee 10+ open forest / forest edge

Red-br. Nuthatch 4+ forest

Robin 2+

Hermit Thrush 4+ forest; singing

Town. Solitaire 2 open forest

Golden-cr. Kinglet 10+ forest

Nashville Warb. 4 brush

Yell.-r. " 6 forest

Hermit " 2 "

Pine Siskin 10+ "

Dark-eyed Junco 5+ "

Fox Sp. 25+ brush - see sp. acct.

R.M. Zink
1980

Journal

MA. Shasta vicinity, Shasta Co. Calif.

2 July

We drove along Klamath R. to Yreka [saw Kingfisher + Ring-billed Gulls along R.]. We then went S on Hwy. 5 to Hwy. A12, east to Hwy 97 + N to cut-off to Bray. At Gravel, (S of Bray) we saw Bl. Terns + Ring-b. Gulls. From Bray (nearly a ghost town) we planned to go to Orr Mtn., an old Fox Sparrow locality. However, it's all private land + the sign said not for public use. So we drove to ~~mt. Helbron~~ Helbron + then to Goosenest R.S. on Hwy. 97. There we talked to Don Sasse who suggested we try an extensive brush field (fairly recent burn) on the W slope of "The Whaleback". We drove S on Hwy. 97 and cut SE on Military Pass Rd. We then took a dirt rd (Conger Lane Fire Rd. - or something close). There's a rd. leading up into the brush field. We tried it but nearly got stuck - it's steep + the road bed is quite silty + uneven. We then continued on to rd. 42 N12. We went E and stopped at some brush along the road. I squeaked out a Fox Sp. so we decided to collect. The brush here is dense + low ($\leq 1\frac{1}{2}$ m) Manzanita + Tobacco Bush. There are no extensive patches - most exists along roads. Also, in some patches, as much as 70% is dead. I found a dirt rd. above the Hwy. that had some fair-sized brush patches + coll. 3 Fox Sparrows. We camped near site.

R. M. Zink
1980

Journal

Mt. Shasta vicinity, Siskiyou Co., Calif.

3 July

I walked up through the same brush fields I hunted last evening. There are some fair sized tracts of brush (primarily Ceanothus velutinus + Arctostaphylos sp.; mostly $\leq 1\frac{1}{2}$ m) interspersed in the fir-pine forest. The "road" I walked was not on the USFS map but is directly parallel the main Hwy. (42 N12) + about 300 yds. above it. Again I noticed a high % of the brush is dead. Fox Sparrows were scarce but when encountered were (not unexpectedly) in patches of live brush. I am unsure whether the dead brush is a result of disease (the live stuff looked healthy) or succession (senescence; there seem to be a large # of maturing trees which might be shading out some of the brush. However, I can't be sure of what killed the brush. I got 1 Fox Sp.

We decided to continue along 42 N12 towards a brush patch pointed out by ~~the~~ Don Sasse (USFS). We drove to end of pavement where there should have been a rt. turn. Unfortunately, none of the roads on the USFS map appeared in place. We drove back along 42 N12 looking for the road that lead over the "saddle" of Whaleback mtn. We found that road + drove to its end, on top of saddle; here we encountered lots of Foxtail Pines but no brush. We backtracked again + took a road which led around the W face of Whaleback mtn.

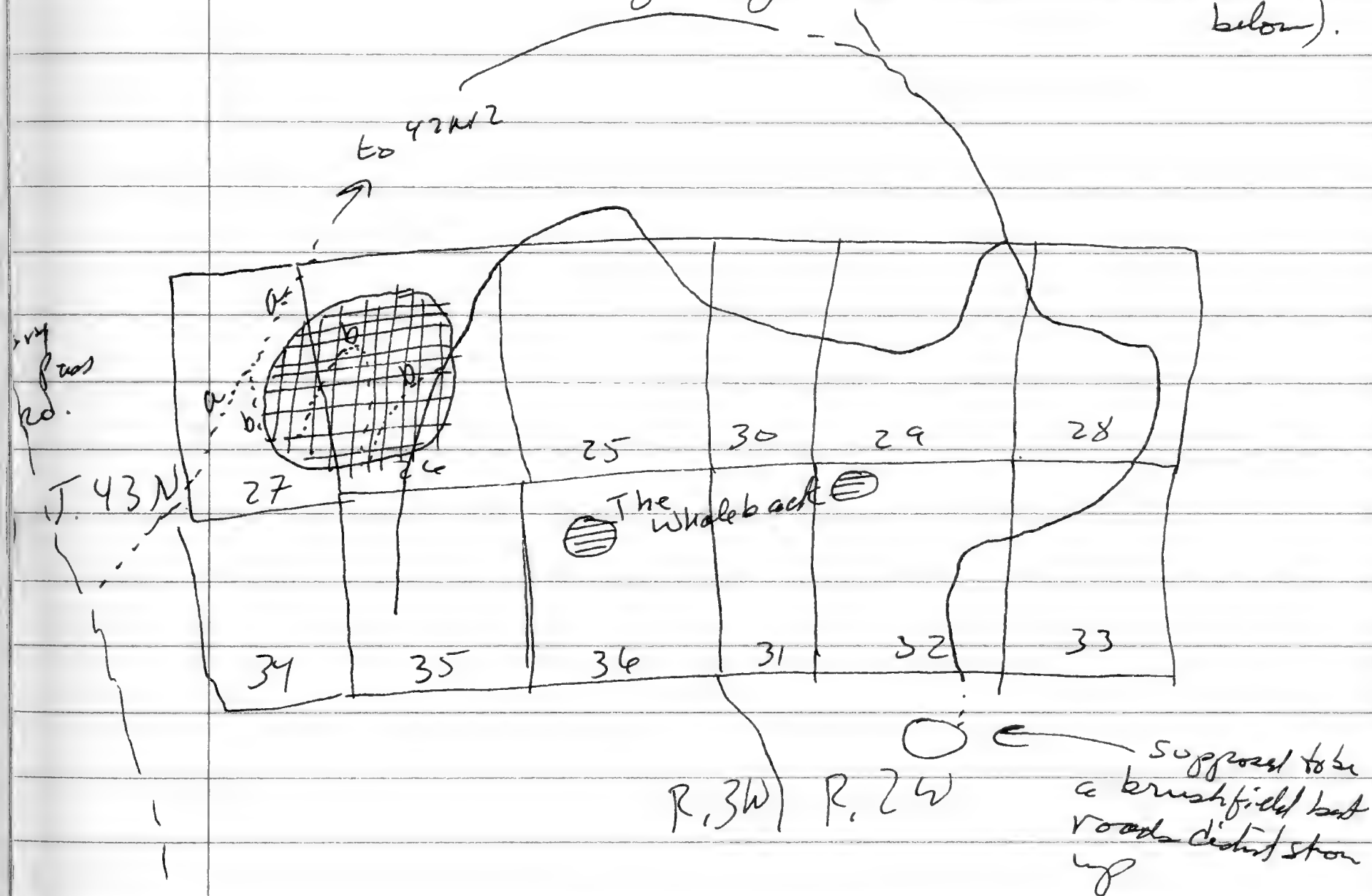
R.M. Zink
1980

Journal

~~Mt. Shasta vicinity Siskiyou Co. Calif.~~

3 July
(cont.)

to a large brushfield. We had tried to enter this brushfield from below on 1 July, but we couldn't get up the road (dotted line below).



⊙ = Whaleback peaks

⊗ = 1gc. brushfield

I remarked on 1 July that it would be interesting to know where Fox Sparrows began to appear on this slope (the brushfield extends from ~1600m to 2100m), but since we couldn't get up road, it didn't matter. We did stop several times along the lower road ("a") but saw/heard no Fox Sparrows. So it was

R.M. Zink
1980

Journal

Mt. Shasta vicinity, Siskiyou Co., Calif.

3 July
(Cont.)

interesting to finally get to the top of the brushfield (see my preceding page), + find Fox Sparrows. As an added aside, the view of Mt. Shasta is superb! This brushfield can be seen from the road below (Hwy 97). It is dominated by Ceanothus velutinus ^{40% - 50%} + Manzanita ^{30 - 40% same in places}, plus lesser amts of Cortaderia ^{5 - 15%} + Ribes. There are Alnus, Salix + Populus tremuloides along a couple stream cuts + some conifers left alone (this area burned ~ 6 yrs. ago? - check) + in small groups. There are a few standing snags, rock piles, fallen snags; there are trails through the brush (lots of deer sign). The brush is not too high ($\leq 1\frac{1}{2}$ m) + most is living. The soil is sandy + very pale gray. The slope is 5-15% but easy enough to walk around in w/o problems. I hunted brush in evening + got 4 Fox Sparrows. It was very windy all afternoon + it was hard to approach birds. It was cold (50°) + cloudy.

4 July

Up early as there was no wind (it came up in afternoon + died down in evening) + I wanted to hunt when hearing was easier. I hunted the brush below rd. (main) + got 13 Fox Sparrows. We spent rest of day working on birds (David got 5 + Susan 1 - for a morning total of 19!). It was pt. cloudy most of the day.

R. M. Zink
1980

Journal

Mt. Shasta vicinity, Siskiyou Co., Calif.

4 July
(cont.)

Bird list 2-4 July (see catalog for 2 basic localities)

Red-tailed Hawk 1 ad. on 3rd

Marsh Hawk 2 ♂ & ♀ ad. seen on 3-4 at 2050m.

over brush. David saw ♀
stoop at something in brush.

Unid. Hummer 3⁺ brush (just Anna).

Common Flicker 4⁺ snags

Hairy Woodpecker 2 pair

Dark Fly 4⁺ brush

Olive-sided Fly 2⁺ forest edge

Stellar Jay 4⁺ "

[Scrub Jay 2⁺ brush at bottom of hill on
2 July]

Clark Nutcracker 2⁺ heard

Mt. Chickadee ~~20⁺~~ 20⁺ forest at 3 July site, fewer
at higher (2050m) site.

Pt. Bush Tit 15⁺ flock in brush

Red-br. Nuthatch 4⁺ forest

House Wren 1 brush

Rock Wren 1 singing ♂

Robin 2⁺

Hermit Thrush 6⁺ forest (lower site)

West. Bluebird 2⁺ pair - brush/scattered trees

Town Solitaire 1 forest (between sites)

Gold-ear Kinglet 4⁺ forest (lower site)

Warbling Vireo 1 singing ♂ (low)

Orange-c Warbler 2⁺ " " (corner/brush edge).

R.M. Zink
1980

Journal

Mt. Shasta vicinity, Siskiyou Co., Cal.

4 July
(cont.)

Yell.-rumped Warbler 4+ conifers

West. Meadowlark 1 (below site on 2 July)

[Yellow-h. & Red-w. Blackbirds along Hwy. 97 near
"Grass Lake".]

Brown-h. Cowbird 3-4 conifers

Lazuli Bunting 2 singing ♂

Evening Grosbeak 4+ conifers at lower site

Cassin Finch 10+ "

Green-b. Towhee 10 brush at higher site

Refous-s. " 2 (below high site).

Dark-eyed Junco 4+ forest/brush edge

Fox Sparrow 50+ brush. see sp. acct.

(note some apparent low-elev. birds at
this site).

Took some photos of brushfield - Mt. Shasta.

Mt. Shasta to Spencer Cr., Klamath Co., Oregon

5 July

We got an early start & headed N on Hwy 97. (It was
24 miles from jxn. Hwy 97/42N12 to our parking spot
in brushfield on SW slope of Whaleback). We got
to Klamath Falls & got some supplies and headed
W on Hwy. 66 towards Keno. I called the Ore.
State Police from Keno & reported that I'd be
coll. birds W of Keno. We drove N on Hwy
& cut E to Spencer Cr. We drove around awhile,
trying to find largest area of willows. We
parked along Spencer Cr. & worked on specimens.

R. M. Zink
1980

Journal

6-7
July

Spencer Cr., 1230 m, Klamath Co., Oregon (see catalog for exact loc.).

I hunted Fox Sparrows during a.m.s of both days. The crew (David + Susan) + myself have some sort of intestinal affliction.

The willow growth is extensive, ranging in width from 5 to 50 yds. I found Fox Sp. where the willows were tallest ($\geq 1\frac{1}{2}$ m) and densest, i.e. the most extensive tracts of willows. The stream ^(Spencer Cr.) was flowing + varied in width from ~3-10 ft. + got up to 3' + at depth. There was some other vegetation among the willows incl.: Ribes wild rose (Rosa sp.). The willows formed (often) a dense network of foliage + passage was often difficult. There was grass growing on more open patches of willow + in other places there was ~~some~~ mud. The stream also divided in places + there were numerous smaller creeks + standing pools.

Vegetation around/done the creek was mainly conifer forest of Ponderosa Pine + some Douglas Firs. There was brush in places (never very extensive tracts) incl. Tobacco Bush, Antelope Bush + some sage. Temperatures were warm at mid-day (+ things were very still, bird-wise, in the willows) + cool at night.

Bird list for 6-7 July at Spencer Cr.
(+ vicinity):

Mallard 1 ♀ along Spencer Cr. - noted as if had been hearing

R.M. Zink
1980

Journal

Spencer Cr., 1230m, Klamath Co., Oregon

6-7 July
(cont.)

Red-b. Hawk 2 near kno

Turkey Vulture 5+ " " , above Spencer Cr.

Mt. Quail 2+ Rmt flushed 2+ from tangled
willow base, somewhat away from Spn.
Cr.

Mourning Dove 4+ along Sp. Cr. (♂♂ singing
from dead fir snags in creek)

Gr. Horned Owl 2 calling night of 5 July

Common Nighthawk 12+ above Spencer Cr. at
dusk. Also a couple outcalling
at mid-day.

unid. hummer 2+ along creek (prob. Anna)

Beetled Kingfisher 2+ " "

Common Flicker 4 snags " "

Red-br. Sapsucker 10+ " " " - very vocal +
numerous

Harry Woodpecker 1 snag in Spencer Cr.

Empidonax 4 willows (Dusky?)

Western Wood Pewee 6 conifers along Cr.

Olive-s. Fly 4 " " "

Barn Swallow 15 along creek

Stellar Jay 5-10 " " (♂♂ both above
creek + in willows)

Mt. Chickadee 6+ conifers along creek

Bush-t. 5+ " " " willows

Pygmy Nuthatch 4 snags along creek. Rmt found
nest in 10 ft standing snag, nest 6 ft high

R. M. Zink
1980

Journal

Spencer Cr., 1230m, Klamath Co., Oregon

6-7 July
(cont.)

House Wren	4	willows (singing ♂♂ - but infrequently)
Robin	6	along creek
Western Bluebird	2	snags " "
Golden-cr. Kinglets	2+	conifers along/above Sp. Cr.
Warbling Vireo	4	willows
Orange-cr. Warb.	2+	" (singing)
Yellow " "	1st	"
Yellow-rumped "	6	conifers along stream
MacGillivray "	10	willows
Red-winged Blackbird	1	♂ "
Brown-h. Cowbird	10	snags in willows, displaying ♂♂ schases
West. Tanager	2	conifers (heard)
Bl.-h. Grosbeak	6	willows (incl. singing ♂♂)
Purple Finch ?	4+	conifers
Green-t. Towhees	4+	willows + surrounding hills w/ brush
Dark-eyed Junco	6+	along creek
Fox Sparrow	20	willows" (see gr. accit)
Song "	40	" very common - lots of fledged young around.

We left for Mt. McLaughlin about 1030
At noon (w of Keno) we saw Gr. Blue Heron ^{white Pelica (4)}
Canada Goose (75), Double-cr. Cormorant (20), Forster Tern (10), Ring-billed Gull (1st, also along Klamath R. & Tree Island)

R.M. Zink
1980

Journal

Spencer Co. to Mt. McLaughlin, Jackson Co., Oregon

7 July
(cont)

We drove to Klamath Falls + got liquid N₂. We then headed W on Hwy. 140 to Fish Lake, where we turned S to Howard Prairie Lake. We stopped at a USFS station + I was told that there were brushfields on Brush Mtn. + around Mt. McLaughlin. We spent night at campground (w/strangers).

8 July

Spent day at Howard Prairie Campground while we all tried to recover from the intestinal ailment we all have had for past 3 days.

9 July

Left Howard Prairie Camp + headed S around Lake (Howard Prairie); then took Keno access rd. to USFS rd. 3804, over Brush Mtn. This is where I was told I'd find "lots of brush" - well we saw very little (incl. OK Baldy) so we cont. N on 3804 to Dead Indian Rd. Here we went left; we quickly found a brushfield (on Boise-Cascade land) of Ceanothus velutinus in bloom. There was one main hillside w/ interspersed conifers (0-40%), open ground ^{80%} (0-15%) + lots of standing + fallen snags. We hunted from 1030-1200; I got 6, + David Good 1, Fox Sparrows. There was undoubtedly a good popn. there, as I saw several other birds + the habitat looked good. Birds seen: Lazuli Bunting, Mt. Chickadee, Brit. Towhee, Robins, Or.-cr. Warblers, +

R.M. Zink
1980

Journal

Mt. McLaughlin vicinity, Jackson Co. Oregon

9 July
(cont.)

We next went N on rd. to Hwy. 140, where we went E to Lake of the Woods R.S., which was closed during week. We then went W on 140 + took rd. to Fourmile Lk., where it was told that there were brushy place (near Mt. McLaughlin). We got to Fourmile Lake (all conif. forest) w/o finding any brushy spot + stayed afternoon, while we worked on birds.

In afternoon we returned to Hwy. 140 + continued W to Rye Springs Spr. rd, where we drove on about 3 miles + then spent night.

10 July

We hunted a 350 x 350 m brushfield (see catalogue) in a.m. + got 7 Fox Sp. + Davis Goshawk got 3. This brushfield was dominated by blooming $1\frac{1}{2}$ in Ceanothus velutinus. There also was Ribes, Castanopsis + Antostaphylos. There were young ^{5-20 ft.} pine + firs, from 0-40% + lots of standing + fallen snags. In general, this area is conifer forest but this small area is an old burn site. The soil was grayish + silty; there are old lava flows in the vicinity. Other birds seen: 1st Sharp-shinned Hawk, Pileated Woodpecker (heard v. loud drumming, cackling), 5 Sapsuckers, Rusty Fly, 2 Gray Jay (D.A. Good), 4 Lazuli Bunting (singing 5-8), 1 Green-b. Towhee, 1 Pine Siskin, 1 Lesser Goldfinch, 5 Steller Jay, Hermit Warb (coll. D.A. Good), 10th Mac Gill. Warb, 20 Or.-ca Warbler, 5 Hermit Thrush,

R.M. Zink
1980

Journal

Mt. McLoughlin vicinity, Jackson Co., Oregon

10 July
(cont.)

We took tissues from the birds + headed out to Hwy 140, where we went E. We found a Blue Grouse DOR, 3 mi. E of summit. We went N on Hwy 232 to 97 + then to Crescent City. At the R.S. it was helped by 3-4 USFS personnel, all pointing out "brushfields" on a large map they gave me of the area. So we went W from Crescent City + took Rd. 244 to Hwy. 58 + then N on 58 to rd. 2421, which goes along S. face of Odell Butte. We stopped along some brushy areas - to the song of Passerella iliaca, and spent evening working on the morning birds.

I called Ore. St. Police in Bend + reported that we'd be collecting in area.

11 July

We spent a.m. coll. Fox Sparrows along rd. 2421; there is (1 mi. of) Tobacco Bush (Ceanothus velutinus) along the road. The brush ranged from a few yards wide to 20'; it was in bloom + $\leq 1/2$ m. There ~~was~~ were some mums also. The soil was silty/sandy gray. The slope was $\leq 10\%$. The surrounding forest was Poud. Pine + Douglas Firs. There are numerous spur roads + access is easy - but we worked along the main (USFS 2421) road.

We worked on birds until 1500 + then left for Bend, where we spent night. ^{It got very still by 0930.}

R.M. Zink
1980

Journal

Stems Mtn. 2100⁺m, Hearney Co. Oregon

12 July

We left Bend at 0700 & drove to Burn. Going S from Burn, in wet marshy area, we saw white faced Gloss Ibis, Avocet, Coot, 2 pr. Marsh Hawk, Yellow-h. & Red-w. Blackbirds. At French Glen I asked about habitats in the Stems, a locality mentioned by Galen Nelson & Jewitt as a Fox Sparrow breeding locality. We drove up on stems mt. rd. to Fish Lake, and then further to past Honeyman Lk. Here we parked at Warehouse Mdw. I hunted the Salix thickets in late afternoon & saw 80 white-c. sparrows, 2 Wail. Vireo, 2 Yellow Warbler, 1 Swainson Thrush, 1 Fox Sparrow (shot at + missed) - the surrounding area is Sage or Populus tremuloides of varying sizes & densities. We then moved to Fish Lk. campground (w/ a small camper fire en route) & spent night.

13 July

We drove to Warehouse Mdw. & coll. 4 Fox Sparrows in a Salix thicket, which was bordered by wet grassy meadow on 3 sides & 1 side by Populus tremuloides. The willow thicket was about 100 x 60 m; the willows were fairly dense, $\leq 1\frac{1}{2}$ m & there was considerable standing water.

We then drove to where road was blocked, just short of Jackman Park, because of snow conditions. David & I scouted the area around Jackman Park (Fish Cr.) & decided it was a good Salix thicket

R.M. Zink
1980

Journal

Steens Mtn, Harney Co., Oregon

13 July
(cont).

for Fox Sparrows - indeed I was singing. We returned to camper, got guns + each headed out along Fish Cr. & coll. G + David got 1 Fox Sparrow. The vegetation along Fish Cr. was predominately Salix, a strip of $1\frac{1}{2}$ in, fairly dense willow, in a band from a few to 35 yds across. It is bordered by grassy meadow in parts + sage brush in others. It is also bordered (it becomes part of) a Populus tremuloides stand. I shot a bandol^r Fox Sparrow.

We headed back to Fish Cr. + worked on specimens.

The Steens Mtn. area was very interesting. High, rolling hills of sage, interrupted by belts of Populus tremuloides (w/ young populus understory), Salix + the small lakes + meadows. There are some rocky (old lava) outcroppings.

Bird List for Steens:

Turkey Vulture	6 ⁺	overhead
Sharp-shinned H.	1	Willows/ <u>Populus</u>
Red-tailed Hawk	2 ⁺	overhead
Kestrel	?	lower elev.
Sage Grouse	1	@ sage near Whoehouse Rd.
Wilson Snipe	3	(incl. 2 young) - low in wet areas near French Glen
Mourning Dove	10	lower elev.
Common Flicker	4	sage
unide hummers	4	Willows

R. M. Zink
1980

Journal

Steens Mt., Harney Co., Oregon

13 July (cont.)	Williamson Sapsucker	4	incl. 1 nest in snag
	Empidonax	4	willows.
	Tree Swallows	30+	around lake; incl. 2 nests.
	Com. Raven ?		
	House Wren	6	willows + poplars
	Rock "	4	rock outcroppings
	Robin	10	meadow
	Swainson Thrush	6	willows (singing)
	Mt. Bluebird	4	snags
	Warbling Vireo	6+	willows.
	Yellow Warbler	10	"
	House Sparrow	5	French Glen
	West. Meadowlark	10	way up from French Glen
	Red-w. Blackbird	10+	near French Glen
	Yellow-h. "	5	" "
	Bull. Oriole	2	" "
	Brewer Blackbird	40	high elevs.
	Starling	10	" " , snags (nesting)
	Bl.-h. Grosbeak	1	singing ♂ in willows
	Cassin Finch	25	
	Orn-t. Towhee	5?	sage
	Lark Sparrow	10	" , way up
	Dark-eyed Junco	1	DA Good found nest w/ eggs
	Brewer's Sp.	4	sage
	White-c. Sparrow	10-20+	poplars
	Fox Sp.	15+	willows (see sp. acct.).

R. M. Zink
1980

Journal

Stens Mtn., Harney Co., Oregon, to Santa Rosa Mtn.,
Humboldt Co., Nevada

14 July

We left Stens + drove S to Denis, Nevada. We then drove N to Winnemucca, as we had to buy a tire. Near Fields, Oregon, we saw 5 Golden Eagles (2 ad., 2 imm., 1?) from road, 3 were feeding on dead rabbits + 2 on a goat; 3 Prairie Falcons, Cal Quail, several Gopher snakes, P.t. Hawks, lot of Ravens, Pronghorn. At Fields, a "town" w/ 2 yards, had a Robin feeding young - surrounded by miles of sagebrush.

We headed up into Santa Rosa Mtns., along Indian Cr. to the Martin Creek R.S., where we talked w/ Lisa Grover about Salix thickets. While we were talking I heard a ♂ Fox Sp. sing.

15 July

Dave + I hunted Salix thickets along Ryx Cr. in early a.m. I thought I saw a Fox Sp. but we got nothing. We then went to the Martin Cr. R.S. + set 2 nets behind the station in willows. Then Dave, Susan + I hunted the willows along Martin Cr. I saw a couple Fox Sparrows but coll. 0 + Dave coll. 1 imm. It was very frustrating as the only apparent suitable habitat is right behind the R.S., where 2 ♂♂ were singing (+ above the R.S.). We netted 1 ad. P Fox Sparrow. We spent the rest of the day near camp.

R.M. Zink
1980

Journal

Santa Rosa Mtns., Martin Cr. R.S., Humboldt Co., Nevada

15 July
(cont.)

The Santa Rosa mtns. appeared to be a suitable out-post for Fox Sparrows - as they had been coll. before (Linsdale). The high stream valleys support dense stands of Populus + Salix, esp. near Martin Cr. R.S. The surrounding hills are mostly sage w/ some Mt. Mahogany. Populus grows wherever there are streams or springs & is more extensively distributed than the Salix. Within the Populus / Salix streamside community there is a lush understory of Lilacs + many other annual plants (incl. Geraniums + ~~fl~~ flowering forbs). It formed, in places, a very dense, lush growth. It contrasts markedly w/ the surrounding ^{dry} hills of sage. However, there were not enough dense willow tangles to support many Fox Sparrows; I'd guess there aren't more than ^{at most} 8-10 pairs in the vicinity of Martin Cr. R.S. The other streams in the area apparently don't support very dense stands either (Lisa Brown, pers. comm., USFS). The Salix was up to 10 ft. + Populus to 20-25 ft.

16 July

We hunted early a.m. near R.S. & got 2 ♂ Fox Sparrows we netted a pair. We then took down the net & prepared to leave.

Bird List Santa Rosa (Martin Cr. R.S.)

Turkey Vulture 2-4 overhead

Coopers Hawk (?) 1 Imm R.S.

R.M. Zink
1980

Journal

Santa Rosa Mtn. Martin Cr. R.S. Humboldt Co., Nevada

16 July
(cont.)

Red-t. Hawk 2 flying
Marsh Hawk 10♂ " (w/o tail!)

Gray Partridge? 1 Indian Cr., low

Mourning Dove?

Poorwill 5+ sage covered hills, stream; night,
calling

Broad-t. Hummer several streamside tangles + aspen thickets

Belted Kingfisher 1 near R.S.

Common Flicker 10+ along stream in aspens

Swift 1 near summit

Empidonax 6+ " "

Common Raven 4+ overhead

Mt. Chickadee 5+ Putzson family group (+ coll. 2)
in mature aspen stand.

House Wren 6+ willows; singing ♂♂

Rock Wren 2+ rock outcroppings above R.S.

Robin 20+ willows + aspen

Swainson Thrush 10+ " " ; singing

Mt. Bluebird 2 aspens

Town. Solitaire (?) 2+ heard only in aspens

Warbling Vireo 15+ along creek

Yellow Warbler 10+ " "

Yellow-rumped " 2 aspens Putzson ♀

Mac Gill. " 15 along creek in willows

Red-w. Blackbird? " "

Black-h. Grosbeak 1 along creek

Cassin Finch 15+ aspens

Green-t. Towhee 1+ sage.

R.M. Zink
1980

Journal

Santa Rosa Mtns, Martin Co. P.S., Humboldt Co., Nevada
16 July Brewer's Sp. ? 2⁺ sage (singing)
(cont.) Fox Sparrow 10 willows.

We drove next to Elko, where I talked to a wildlife biologist (Warren —) about willows in the Ruby Mtns. We headed for Harrison Pass ^{P.S.} (an old locality). We drove along road to Pass but there weren't sufficient willow thickets for Passerella. We did see 5⁺ Lewis Woodpeck., 5⁺ Song Sparrow, Brn. h. Cowbirds, Yellow Warblers, Warb. Vireo, ^{Chickadee} Empidonax, ¹ Myadestes cinerea, Red-br. Sapsucker. We pulled into the Harrison Pass G.S. & asked some fish biologists about willow thickets. They didn't help much. We camped nearby.

17 July We returned to Harrison Pass P.S. & hunted the willows. I walked a fair distance of Green Mtn Canyon but the densest willows I encountered were right at ~~Green~~ Station. Dave shot the only Fox Sp. either of us saw. I suspect there were more but we couldn't even get glimpses of other birds.

There were a # of other birds along the willow:
2 ad. Bl.-cr. Night herons, 3 Spotted Sandpipers, ♀ Mallard w/ brood of 6 2 wk. old young, Turkey Vulture, 2 Killdeer, Mourning dove, 2 Com. Nighthawk, hummer, Downy Woodpecker, 4 House Wren, Robin, Swainson Thrush, 5⁺ Warb. Vireo, 10⁺ Yellow Warb., 15⁺ Brewer Blackbird, Rufous-s. Towhee, 5⁺ Song Sparrow, 10⁺ Brn. h. Cowbird, 3⁺ Yellow-cr. Chat

R. M. Zink
1980

Journal

Harrison Pass, P.S., Elko Co., Nevada (Ruby Mts.)

17 July
cont.

1 Fox Sparrow; Castor canadensis were apparently quite numerous.

We decided to try some of the other old localities. We drove to Tigger + headed W. We turned off a west E following signs to Long Canyon. The road was too bad so we turned back. I then decided to try Lamaille Creek - an old locality but presently under heavy tourist use. There is a paved road to the head of Lamaille canyon. Here, much to my surprise, we found extensive, dense 1-1½ m Salix thickets. It was nearly dark + quite cold when we arrived, but we all went collecting. I coll. 4 + D. Good 1 Fox Sparrow. There are numerous seeps, springs + streams around canyon, in addition to Lamaille Creek. There are some bare areas, rocky outcroppings + scattered to moderately dense ~~to~~ conifers. The willow growth was surprising in that it had the appearance of brushy chaparral. The willows occur in clumps + fairly extensive tracts, both on the canyon floor + ^{1/4} way up sides of the canyon.

18 July

We got up very early. It was cold + partly overcast. We hunted until ~ 9 a.m. There was quite a bit of activity early but by 9 it was warming up + things had quieted down. Birds seen in Lamaille Canyon

R.M. Zink
1988

Journal

Lamoille Canyon, Elko Co., Nevada

18 July
(cont)

included: 1 Short-eared Owl (flushed from base of
45 ft. Salix in thicket - no nest found + the bird was
flushed evening of 17th + a.m. of 18th; 20+ Robins - incl.
recent fledglings, 15+ Zonotrichia leucophrys, Song
Sparrow, Lincoln Sparrow, Cassin Finch, McColl.
Warbler, 20 Fox Sparrow (see sp. acct.)

We left for Tonahoe around 1000, going
via Elko, Fields + Austin. At Austin R.S. I was
told that Kingston Cr. (old locality from Lindale)
supported dense Salix growth. We drove back S
along E flank of Tonahoe + went up Kingston Canyon.
We drove past the R.S. about $\frac{1}{2}$ mi., but the densest
willows are near a campground about $\frac{1}{4}$ - $\frac{1}{2}$ mi. E
of the Kingston Cr. R.S. There is also a reservoir
about $\frac{1}{4}$ mi. E of the R.S. Near the R.S., there seems
to be too much pasture + too few Salix (+ too
large at that) for Fox Sparrows. Spent night at
campground

19 July

We all hunted along/in the dense willow
thickets just W of the campground. There are also
numerous other plants incl. water ^{Aspen} birch, Ribes, Rosa,
needles, +. The willows get to 2 m + are nearly
impenetrable in places; the willow grove is 2-15
m in width. The surrounding vegetation is
mainly sagebrush scrub. It was cool in the
early a.m. but was quite hot by noon + cold.

R. M. Zink
1980

Journal

Toiyabe Mtns, Kingston Cr. R.S., Co. Nevada

19 July
(Cont.)

the only Fox Sparrow I saw + David + Susan saw none.
There were many Yellow Warblers, some Song Sparrows,
Lazuli Bunting (next to Willows),

We left for MDE about 1000, going by Reno
+ Sacramento.

Zink, R.M.

1980

Journal

Paraguay

R.M. Zink

1980

Journal

Part of Paraguay

Berkeley to Asuncion, Paraguay

⁺²⁹
28 Jan.

Left San Francisco ^{11:30 p.m.} for Miami. Got flight from Miami to Asuncion. Stayed w/ Phil Myers on night 29 Jan.

30 Jan

Got bus from Asuncion to Encarnacion (900 G's) (departed noon). ^{raining overcast} On trip I saw:

Maguari Stork 4⁺ wet, tall grass savannah
Unsp. ibis 40⁺ - inflorescence in " - appeared all dark

Ducks - small teal-like 5 pond

Cathartes sp. 10⁺ dead tree

poss.
Pearl
Kite

White-tailed Kites 3 along road

unsp. lge. Hawk - all brown -

Roadside H. ? 1 along rd.

Crested Coracara 10 pond " "

Chimango " ~20 " " " & flying

Am. Kestrel 40⁺ " " " "

Wattled Jacana 1 pond

So. Lapwing 50⁺ pasture along rd.

lge. dk. plain Pigeon 5-7 flying

Ground Dove 15 along rd.

~ Monk (?) Parakeet 6 grove of trees

Guira Cuckoo 10 shrub-savannah

Ani 20 " "

Burrowing Owl 5 pasture

Pauraque ? 1 fencepost (cloudy)

Field Flicker 10 utility poles

R.M. Zink
1980

Journal

Asuncion to Encarnacion, Paraguay

30 Jan. (cont.)

Rufous Horned 13 & many nests on utility poles
Cattle Tyrant 20 scrub along rd.
Fork-tailed Flycatcher 10 " " " (some w/ $\frac{1}{2}$ grown
tails)

Kiskadee 5-10 along rd.

Blackbird sp. 10+

Oriole (bl. head & yellow wing patches) scrub along rd.

Swallows sp. 100+ along ponds + river

Zonotrichia capensis few near bldg.

Saffron Finch " " "

+ Common Egret 2 ponds
Whistling Heron 1 "

Arrived Encarnacion ~ 6:15 p.m. Got taxi to
El Tirol.

31 Jan

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto.
Itapúa, Paraguay

In a.m. went on found Tirol forest with WKJ. We
made the circle route near lower cornfield. In
afternoon we cut net lanes between hotel & airstrip
trail. & checked nets in p.m. (RMZ 1240); also saw 2
So. Lapwings at "clearing."

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

1 Feb.

By 0800 had trail towards "Euleri Gulch", N of Hotel. Weather
was warm w/ some wind, pt. cloudy. In addition to eggs
collected (RMZ 1241-1245), I saw 3+ Chiroxiphia caudata
(incl. ♀-plumage singing ♂), 1 Scale-th. Hermit, Variable Hutzkies,
Plain Antvire, heard Chamaeza campanisona, +. In
afternoon I went up to "clearing" for ~3 hrs (clear, still + hot)

+ saw:

Black Duckbill 15+ soaring

Swallow-t. Kite 1 "

Columba picorum 4-6 edge trees + flying

Columbina picini 4 on ground near puddle

" talpacoti 2 " " " "

Leptotila verreauxi 4 calling from forest

Piaya cayana 2 edge

Crotophaga ani 4-6 "

Colaptes cafer 1 flew over

Furnarius rufus 2 at puddle

P. fangus sulphuratus 3 edge trees

Tyrannus melancholicus 2 " "

Muscivora tyrannus 2 flying high overhead ^{migrating?}

Tijera cayana - collected from 30' in sparse
leafed tree

Corvid sp. 15 flock flew over

+ 30 Cliff Swallow, 20 Swift (Gray-rumped) 1, 20 unid. Swallow

2 Feb.

~0745 left for area N (+ below) of hotel. Activity
was scarce until ~0900 (clear + warm).

R.M. Zink
1980

Journal

Hotel El Tirol, 230 m, 19.5 km. by road NNE
Encarnación, Dpto. Itapúa, Paraguay

2 Feb.

Hit little pockets of activity, usually in form of "mixed sp. flocks". I'm learning some calls/song but there's still much I don't know. See catalogue for specimens. Saw/heard

Timamou	1	calling from dense forest
Leptotila verreauxi	4	" " " " (+ high)
S.b. Hni	6	airisting trail
Phaethornis eurhynchus	2	along creek
Variable Antshrike	4	dense undergrowth in forest
Plain Antshrike	2	" "
S.t. Manakin	3	heard
G. kiskadee	2	" along airisting
Basil (external leucoblepharus)	6	along trail
Vireo olivaceus	4	" " (some singing)

[swits - along airisting trail].

Spent day working on birds at room. Thought I heard a Glaucopteryx brasiliensis in p.m.

[Saw House Wren near upper pool]

3 Feb.

0800 - dew, still & getting warm. Went to "reservoir" to look for herons, but saw Pigeons (C. picazuro), Kiskadees & Guira Tanager (coll. ♂, saw ♀). Went next to cornfield via First Jr Cross-country Trails. Along trail saw 1 Gilded Hummer (coll.), 2 Xencas, 4+ Basil. culci, 4+ B. leucoblepharus, 2 Variable Antshrike, Leptotila heard, heard Timamou (?), 1 Squirrel Cuckoo, Olivaceous, Woodcreeper, 2+ S.t. Manakin, 3+ Vireo olivaceus (singing ♂),

R.M. Zink
1980

Journal

Hotel El Tirol, 230m., 19.5 km. by road NNE
Encarnación, Dpto. Itapúa, Paraguay.

3 Feb. (cont.)

Got to cornfield ~0930. Saw Turk. Vult. 3 Small. f. Kites, 2 unid. kites, 4 Sm. b. Kites, 5 Red-cr. Finch, 1 Basseriina cyanea, several unid. small Tyrannids, Sq. Cuckoo, S. leucophaea Flycatcher (high & dead ~~tree~~ branches of live tree), House Wren (heard). Probably most frustrating experience to date. I stalked & shot a Long-tailed Tyrant (Cobania colonus) but could not find specimen in 1 hr. I saw all field marks & in sure of this I.D. Returned to hotel exhausted. In p.m. went to clearing & saw many pigeons (C. porzana), Kiskadees, Ground Doves (C. talpacoti), 5 Aris, 3 flocks of blackbirds or cowbirds (~~~~~ ~120 birds w/ few PF), 4 Turdus sp. - seemed in migration now. I also saw 3 Nighthawks (2 Common) in distance - saw white wing patches & observed characteristic nighthawk flight

4 Feb.

0800. NKS & I left for Becker's fields & spent a.m. collecting (see catalogues). We went especially to try for a vulture at Becker's dead horse - saw 5 Blacks but got 0. There was a lot of activity at the forest, along the creek; many flycatchers (Kiskadees, Becards + smaller sp.) in the canopy. ~~Don't~~ ^{Did see} a Vermilionis. I coll. a Phylloscopus rupestris about 20 ft. up in a sub canopy, edge tree. We turned out into corn field & I shot a ♀ Falco sparverius, which was with

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road WNE Encarnación, Dpto. Itapúa, Paraguay

4 Feb. (cont). another bird - perhaps mate or young. On way back through forest E of Becker's Tung orchard I shot a Dark-billed Cuckoo.

5 Feb. Rained most of night. I went out from 0830-1030 + saw essentially 0, despite walking through Becker's pasture + forest. Did see 1 Kiskadee + a few other things. About 3:00 p.m. the rain let up + I headed back to Becker's. The area was teeming with birds, probably owing in part to the rainy morning. There was also evidence of some migration (especially Fork-tailed Flycatchers^{see below}). I coll. a Black Vulture at the SE corner of Becker's Tung orchard; it was perched in a tall dead snag w/ two other BV's. When I returned to road I saw 2 Roadside Hawks in the pasture across from Becker's. I decided to investigate. First, it is noteworthy that this "pasture" is different in quality than others around here. There exists a mosaic of varying densities of trees, shrubs, perennials + short grass. The shrubs add a "scrub" dimension typical of Mockingbird habitat. While trying to collect swallows or Fork-tailed Fly. I saw a small yellow warbler about 15 ft. in a tree surrounded by loose (30-50%) 3-4 ft. scrub + open grassy spots; it proved to be a *Geothlypis*, and the first one for the study.

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

5 Feb. (cont). Bird list p.m. 5 Feb.

Black Vulture	2	perched in dead tree
Roadside Hawk	2	flying over shrubby pasture
Kite - prob. White-tailed	1	"
<u>Falco sparverius</u>	1	perched " "
Picazuro Pigeon	6	flying overhead - saw 3 in fruiting tree by net (near rooms)
<u>Columbiga picui</u>	2	along road, perched in trees in open shrubland
" <u>talpacoti</u>	6	"
<u>Leptotila verreauxi</u>	2	1 on ground in Tung Orchard
So. L. wren	2	pasture
Smooth-billed Ani	6	" w/shrubs, edge
<u>Colaptes campestris</u>	6	" " "
Kiskadee	6	" "
Boat-billed Fly	2	forest edge
Trop. Kingbird	3	swags in pasture + forest edge
<u>Empidonax varius</u>	4	" " "
Fork-tailed Flycatcher	50	shrubby pasture - mostly in taller (20') trees - clearly migratory restlessness as birds stopped in tree tops + flew off in groups (loose) of 2-3.
Cliff Swallow	30	shrubby pasture (overhead)
<u>Progne chalybea</u>	10	" " "
Gray-rumped Swift	5	" " "
House Wren	2	dense brush along road
<u>Sicalis flaveola</u>	3	" " " + trees

R.M. Zink

Journal

1980

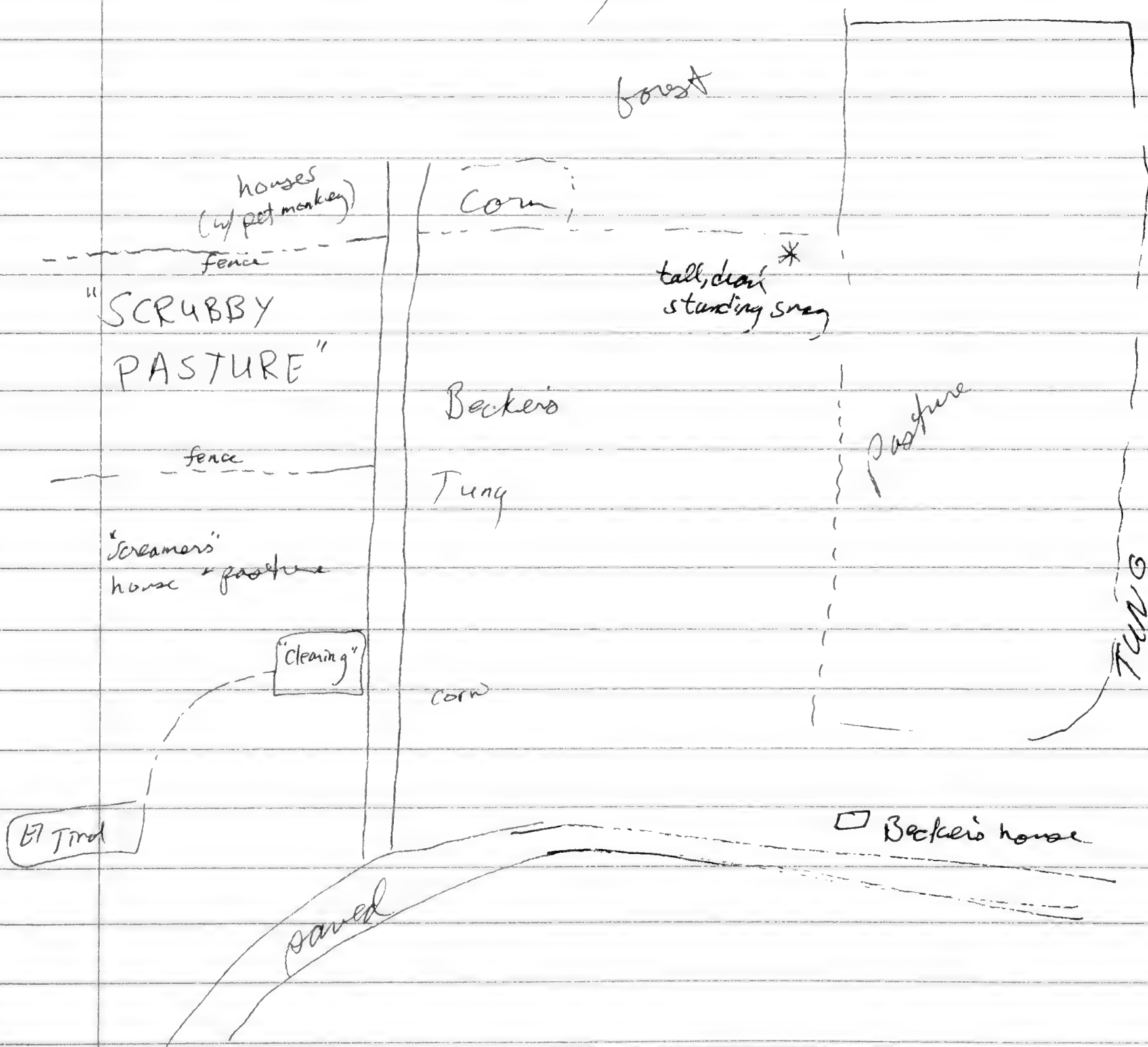
Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay

5 Feb. (cont.) *Coryphospingus cucullatus* 6 roadside scrub.

Geothlypis 1 ~~RME~~ collected from 20 ft. tree in scrubby pasture

≈ *Volatinia* - seemed to be a small dark seedeater but hypothetical at best

The amount of activity was impressive. It seemed to be a combination of migratory activity & an "after rain" effect. This scrubby pasture seems unduplicated in the area (however I haven't seen the entire study area). Its location is:



R.M. Zink

1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

6 Feb.

Got out by ~0815. Hot most of morning; it turned cloudy by 0930 + seemed ready to rain but it didn't. I went down road + cut over into Becker's Tung Orchard, through forest (+ pasture) to "guan" trail, along cornfield through forest, pasture + back to road. There was less action than last evening (in general) and it seemed to get hot + still by 0945. ~~At~~ About 1030 I watched several spp. in a 35 ft tree along the dirt road, incl.: Trop. Parula (coll.), Red-eyed Vireos, unid. warbler-like bird - small (v. gr. - a guess), active + no. desert, plus Kiskadees + Trop. Kingbirds. In the evening, I went to Becker's pasture + shot a Whistling Heron. Bird list for morning ^{and evening} trip:

Black Vulture 4-8 circling high overhead
Whistling Heron 2 1 coll. or both perched on dead snag in open pasture.

Caracara spp. 1 edge of Becker's pasture - seemed all brownish, v. worn, w/ light patches near end of wing. Was eating something.

Falco sparverius 2 shrubby pasture + cornfield.

Arundinaria graciosa 1 stream in Becker's forest. Bird was in second growth trees + 6' ^(near stream) grass.

Picazuro Pigeon 6 mostly flying high overhead.

Columbina piccini 5 along road, ^{shrubby} trees in pasture on edge

" talpacoti 10 " " "

R.M. Zink

Journal

1980

Hotel El Tirol, 230m, 19.5km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

6 Feb. (cont.)	<u>Leptotila verreauxi</u>	4	calling from forest (edge)
	Sm. b. Ani	8	shrubby pasture - 2 prob. 3/3 grown fledglings.
	<u>Guiragura</u>	25	large flock edge of Tung Orchard.
	<u>Piaya cayana</u>	2	heard in forest
	<u>Colaptes cafer</u>	6-8	shrubby pasture - on ground + dead snag - chasing, calling, + displaying.
	<u>Furnarius rufus</u>	3	pair in shrubby pasture, edge forest
	<u>Kiskadee</u>	10	trees at forest edge + in pasture
	Trop. Kingbird	5	" "
	<u>Empidonax varius</u>	4	" "
	Fork-t. Flycatcher	20+	shrubby pasture - often travelling 2-4 birds, seen in migratory state.
	Cliff Swallow	4	overhead
	G. b. Martin	4	"
	Gray-rumped Swift	8	"
	House Wren	6	brush - several singing ♂♂
	<u>Turdus</u> sp.	1	fruiting tree by nets
	<u>Zonotrichia capensis</u>	4	brushy pasture.
	<u>Sicalia flourensii</u>	6	" " (1 young)
	<u>Coryphospingus cucullatus</u>	10	" " (feeding young).
	Blue Dacnis	2	forest edge at Beckers
	Trop. Parula	1	coll. from ^{35'} tree bordering road
	<u>Basileuterus culicivorus</u>	2	1 singing ♂ forest edge
	" <u>leucodermis</u>	4	forest - calling
	Red-eyed Vireo	4	trees bordering road
	Condorbird sp.	2	shrubby pasture (♂ + ♀)

R.M. Zink
1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

7 Feb.

Out by 0800. Went to Becker's pasture. Large flock (~25) of Guira cuckoos. At edge of Tung orchard I saw a Trogon perched on a vine hanging from a large tree (+ w/in 50' of Tung forest edge) - RMZ 1266.

There were 3 Colaptes campestris in the 1 ge. dead snag at Tung Orchard edge - shot but wounded one - followed them into Becker's pasture + got RMZ 1267 from on top of a 20 ft. burnt snag - there were several others around. Collected a Guiraca (RMZ 1268) from a flock of 15 in Tung. I then went into forest from Tung orchard. I heard a raptor scream + saw a Milvago chimachima take off from a dead standing snag in forest. I squeaked + it kept circling me (while I got correct shell in gun).

In evening I returned to Becker's pasture to hunt for caprimulgids/owls, from 6:30 - 8:00 pm. Saw a small Otus fly from Tung, a large bat + I thought I heard some caprimulgids in forest. I did see a caprimulgid (night hawk-like) flying in the distance. For bird list see 8 Feb.

R.M. Zink
1980

Journal

Hotel El Tirol 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
Paraguay.

8 Feb.

0800 headed for Beckers. While walking down road I saw 4 Scaly-headed Parrots (*Pionus maximiliani*) fly into a 20 ft. tree in the "scrubby pasture" - coll. 1.

Along Tung Orchard/road coll. a singing (?) ♂ Euphonia (RMZ 1270) as it foraged (sang?) from a Tung tree. I collected the Antonomolus (RMZ 1271) in the fairly dense second growth vegetation along creek at Beckers, at the pasture - second growth (10-20 ft trees w/ grass/forbs) edge (was same locality as the Woodcuckoo (RMZ 1269)). I returned to Tung tree along road where I coll. a Parula warbler a couple days ago as there seemed to be a lot of activity there! While waiting I noticed a group of small birds mobbing something. With binoculars I could make out a small owl perched in a vine tangle 25 ft. high - essentially at the forest-pasture edge; it was an *Otus choliba* (RMZ 1272).

Bird list 7-8 Feb.

Tinamou 3 heard calling in forest near hotel.

I approached very close but saw 0.

Black Vulture 10 soaring

Turkey " 4 "

Milvago chimachima 1 coll. 7 Feb. - see notes (of 7 Feb.)

Swallow-tailed Kite 3^r over hotel

Sparrow Hawk 2 forest edge.

R.M. Zink
1980

Journal

Hotel El Tiro, 230 m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
Paraguay.

8 Feb. (Wed)

Bird list 78 Feb. (contl.)

Slaty-br. Woodrail 1 coll. 7 Feb. sec notes

Picazuro Pigeon 10 overhead, some perched in large standing dead snags.

Columba picui 4 road edge

" talpavot: 8 "

Leptotila verreauxi 3 calling from forest

So. L. quing 2 Becker's pasture on 7th near hotel on 8th

Bl.-necked Stlt 1 high overhead on 7th hypothetical

Coccyzus sp. 1 airstrip trail

Squirrel Cuckoo 4 forest - also 1 eating fruit at tree near hotel

S.b. Ani 10 brush, forest edge

Guira Cuckoo 25 " " " Tung

Otus choliba 1 coll. 8 Feb.

unid. caprimulgid 2 high on night of 7th

Chaetura cinereiventris 10 overhead at clearing

Trogon sururus 1 coll. 7 Feb.

Melanerpes candidus 4 overhead - flying high on night of 7th + a couple on 8th.

Colaptes campestri, 6 snags, open woodland

Furnarius rufus 2 scrub along road

Atornodus leucophthalmus 1 coll. 8 Feb.

Empidonax euleri 1 second growth (at side of RMB 1271)
saw ^{tail} wing-flicks as it moved quickly about.

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
Paraguay.

8 Feb. (cont.)	<u>Machetornis rixosus</u>	2	scrubby pasture
	<u>Kiskadee</u>	4	" " edge
	<u>Variegated Fly.</u>	2	snag edge disturbed forest
	<u>Trop. Kingbird</u>	4	" " "
	<u>Fork-b. Fly</u>	20	scrubby pasture
	<u>Trogon chalybeus</u>	8	overhead (high)
	<u>Cliff Swallow</u>	4	"
	<u>House Wren</u>	2	brush along road + Tury (singing).
	<u>Robin sp.</u>	1	Back's forest
	<u>Sicalis flaveola</u>	6	brush, Tury - singing ♂??
	<u>Red-cr. Finch</u>	6	"
	<u>Guiraca Tanager</u>	2	tall edge tree at clearing.
	<u>Euphonia</u>	1	coll. 8 Feb.
	<u>Basilornis culicivorus</u>	3	forest
	<u>B. leucog.</u>	3	"
	<u>Vireo olivaceus</u>	2	" edge. 1 singing ♂
	<u>Blackbird sp.</u>	200	- large flock on night of 7 th . Seemed to be going ESE (towards river?)
	<u>Cyanocorax chrysops</u>	8-10	flock at edge of clearing.

9 Feb. 0800 - clear + warm, later got hot. Went to cornfield via airstrip + cross-country trails. There was considerable activity in the forest but it was patchy, as usual. Saw 4-6 monkeys between "2-log bridge" + cornfield. At the cornfield edge I saw 3 or 4 Colonia

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5km. by road NNE Encarnación, Dpto.
Itapúa, Paraguay.

9 Feb. (cont). Colinus perched in a tall dead tree. I followed them to the (actual) forest-comfield edge + coll. 2. The juv. was foraging from 7-30ft. + when collected it was 7ft. in a small tree in some fairly dense second growth scrub. I also coll. a Phylloscarta in some open second growth about 2ft. off the ground. On my return through forest via "middle" trail I coll. a Thamnophilus caeruleus as it perched 20 ft. above ground on a vine. For bird list see 10 Feb.

10 Feb. Spent a.m. along airstrip trail waiting for something hawk-like to appear - nothing showed. It turned cloudy + by 1100 was raining + blowing quite hard. In p.m. I walked down road and (after a rainy day) saw very little.

Bird list 9-10 Feb.

Tinamou sp. 3 (one w/ descending guttural clucks) - heard one on 9th at comfield. Also heard 1 in the scrubby pasture - which seemed a bit out of place. (poss. Guira Cuckoo - NKJ).
heard 1 along airstrip trail.

B. Vulture 4-6 overhead

Turkey " 1 comfield on 9th

Roughleg Hawk 1 " " " - perched dead

snag - screaming

Falco sparverius 3-4 comfield, Becker's, scrubby pasture.

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
Paraguay

- 10 Feb (cont). So. Lapwing 2 pasture.
Columbina picul 5 " , along road, edge. calling. ^{noted a few pairs.}
" talpacoti 10
Leptotila verreauxi 2 1 prob. in fruiting tree
Picazuro Pigeon 10 mostly flying
Geotrygon violacea 1 Eulaei gulch on 9 Feb. Flushed
from ground into lower branches (~5ft)
of a small tree.
Sm. billed Ani 30-40 3 flocks - one in cornfield, one at clearing,
one down rd. past Becker's Tung Orchard.
Guira guira 30 in Tung, pasture. Saw a $\frac{3}{4}$ grown
fledgling following an adult on
ground in pasture.
Piaya cayana 3 forest, one in tree in scrubby
pasture.
Gray-r. Swift 10 overhead
Phaethornis eurhymus 1 flew thru scrubby pasture
towards forest.
Melanerpes candidus 4-6 flying overhead
Picumnus temminckii 1 forest on 9th
Colaptes campestris 6 pasture (on ground) & trees.
Thamnyphila caeruleus 2 forest
Elaenia sp 1 " on 9th
Leptopogon amaurocephalus 1 " " "
Phylloscopus sp 1 coll. (RMZ 1276)
Kiskadee 4 forest edge, shrubby pasture

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1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay.

10 Feb. (cont.) Cattle Tyrant 2 scrubby pasture
Fork-tailed Flycatcher - 35 - " " Several

groups of 10⁺ in apparent migratory
restlessness; often flying about in loose
flocks. Seen perched in trees in the
scrubby pasture. At least 1 yip.
seen flying N.

Progne chaulybea 4 Over Becker's pasture.
House Wren 4 shrubs along road, clearing
edge. ♂♂ singing

Turdus rufigentris 2 forest edge - appeared in molt
Sicalis flaveola 6 dense shrubs - some singing.
also juv.-plumage birds
around; possibly being fed by
parents.

Coryphospingus cucullatus 10 edge. Singing. Several
♂♂ looked to be molting heavily.
Juv.-plumage birds around - 1
prob. being fed by adult.

Hemithraupis guira 6 - seeming v. plastic in habitat as
so far seen then from 6 ft. to 40 ft. Both
♂♂ & ♀♀ seen.

unid. blue tanager ? Paenib.

Ruf.-vented ~~Coccyz~~ Condill 4? Sev. small groups of
small birds flying about forest canopy.

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Journal

Hotel El Tirol, 230m., 19.5 km. by road NNE Encarnación,
Op'to. Itapúa, Paraguay

10 Feb. (Wed). Basileuterus culicivorus 4 forest, Heard 2 singing ♂♂
" leucophthalmus 6 " " several " "
Vireo olivaceus 4 " (longth) - heard 1 singing ♂♂
Molothrus sp. 1 in pasture w/ cows.
Cyanocorax chrysops 1 forest edge.

Also possibly noteworthy was a sighting on 10 Feb. in evening; from the road looking at a large standing dead snag in distance, I saw a mostly white passerine perched in the top. It was almost certainly not a Fork-tailed Flycatcher & possibly a Xolomus sp.

11 Feb. In a.m. helped NKT put up nets & then hunted airstrip trail & gravel pit. Saw little (couple) Swifts, Cliff Swallows, B.V., some unid. tanagers in canopy. I then walked to clearing & along road to "scrubby pasture". I saw a mockingbird in a small tree & went in to get a closer look. I saw 3-4 Mockingbirds (^{chalk-browed} ~~prob. tropical~~) but couldn't coll. They seemed to be grouped & almost in a state of migratory restlessness. I also saw 2 Epanalite Oriols, 10 Coryphospingus cucullatus, 5 Sicalis flaveola, 4 Zonotrichia capensis, 2 Trogl. Kingbirds, 1 Combird sp., 2 House Wren, 2 Fork-t. Fly.

R.M. Zink
1980

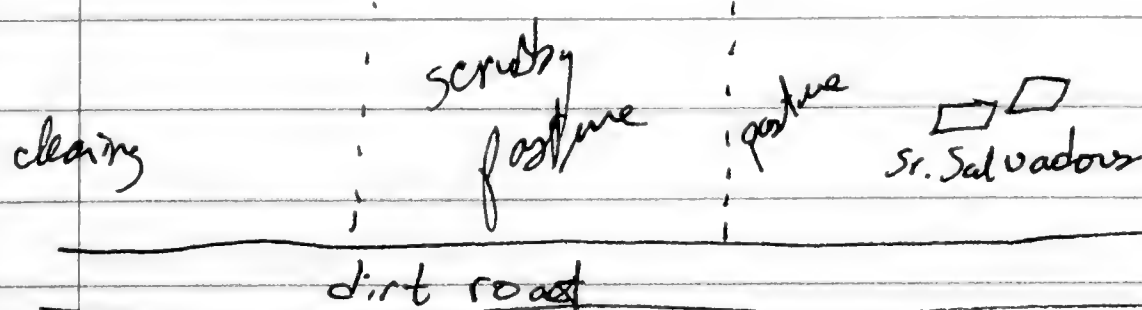
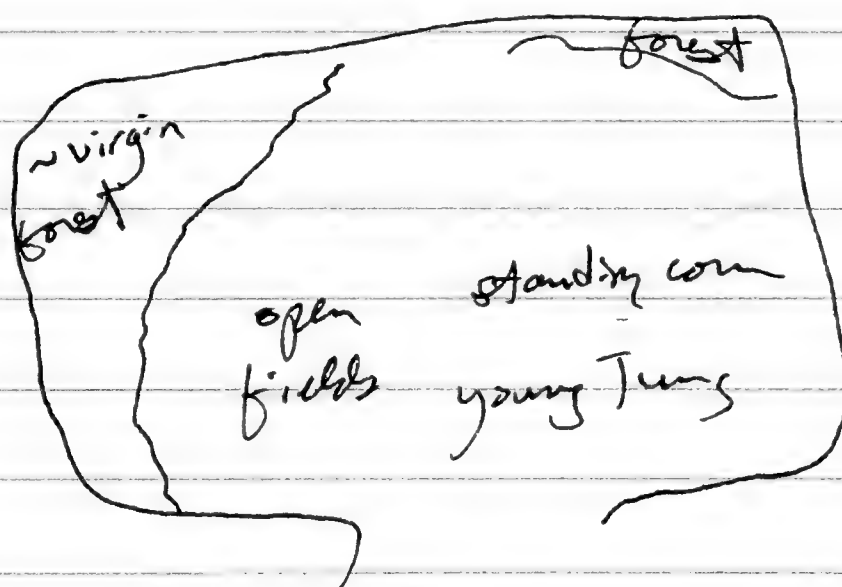
Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto.

Itapúa, Paraguay.

11 Feb. (cont) 10 Anis, 5 Guiraguira. Returned to hotel at noon. About 3³⁰ p.m. I left for Beckers (but didn't end up there). It was v. hot & there was little activity.

I walked down the road & saw the owner of the farm across from Beckers. I asked him if he ~~was~~ owned the "scrubby pasture" but he didn't. I told him what we were doing & he said he had a lot of area we could collect on, so I followed him (Sr. Salvador, I think). I spent the rest of the afternoon wandering around his property.



Beckers Tung

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1980

Journal

Hotel El Tirol, 230 m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

11 Feb. (cont)

Bird list for "Salvadores field"

~~Little~~ Tinamou - flushed 2 in 10' grass near confield edge. Sm. brown, w/ barred (heavily) back

unind. small gray Tinamou flushed 4 in deep (3-4') grass

Bl. Vulture 2 overhead

White-b. Kite 2 perched top dead snag (pair?)

Milvago chimachima 2 flew overhead 500 m apart

Falco sparverius 1 perched dead snag

Columba picui 2 fields

C. talpacoti 4 "

Columba picarum 16 overhead, perched dead snag

* Leptotila verreauxi 2 - in bushes along field + in com. Or else a pigeon not yet collected.

Crotophaga ani 10 shrubby areas

Guiraca quina 20 " "

Colaptes cafer 4 dead snags

Coryphospingus cucullatus 10 brushy areas

Sicalis flavedula 4 " "

Volatinia jacarina 2 Coll. 1 (RMZ 1280) in a small patch of tall grass w/ a couple of 10' bushes.

Chopi Blackbird - 40-50 flock going N.

+ ~~Chrysomitris~~ + Melanerpes candidus 3 on snags

12 Feb. In a.m. went to Becker's. It was foggy +

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1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay.

12 Feb. (cont) Thought it would be a good opportunity to hunt for raptors. Saw an imm. Milvago chimachima on top of dead snag (RMZ 1282); it also saw 2 adults fly overhead. Saw 2 Syrignus sibilatrix perched on dead snag, Kestrel - 1, 2 Kiskadee, 10 Guira Cuckoo, Picazuro Pigeon - 2, Melanerpes candidus - 2 overhead, House Wren - 1 in Tung, Returned to Tirol forest + gravel pit. Saw 2 Swifts, 1 Phaethornis eurynome, 1 small unid. hummer, 1 Chrysomitris melanochlorus - on snags in forest.

13 Feb. Spent day at hotel.

14 Feb. In a.m. checked nets + hung out along airstrip. Coll. an Empidonax euleri at the N end of the "gravel pit", as it perched in some 10 ft. bushes + sm. trees. In afternoon (~1700) checked nets + walked airstrip trail. For bird list see 15 Feb.

15 Feb. 0810 went airstrip trail to cross country to cornfield. Was pt. cloudy + got v. hot by 1030. There was a fair deal of activity in the forest before 1000. I coll. a Myiodynastes maculatus along cross-country trail in a 2^o tree in a sl. opening in the canopy; it was near 2 Tityra inquisita

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay.

15 Feb. (cont) In the cornfield & coll. a Melanerpes candidus from a group of 6-8. On way back got a Myiornis auricularis along middle trail about 15 ft. off ground on small tree. Bird list 14-15 Feb.

Crypturellus tataupa 2 heard in forest.

Bl. Vulture 5 overhead

Turn. " 2 1 w/ wedge-sh. tail (molting)

lg. dk. unid. hawk 1 saw by PK Jr Rmt from net on 14th

* Columba talpacoti 4 - flushed bird from nest (w/ 2 eggs)
in "cornfield" on 15th. Nest 5' in small tree in weedy part of field, w/ 30% sun trees & tall weeds. Eggs white.

C. picui 2 clearing

Cathartidae verreauxi 2 calling forest

Geococcyx violacea 1 Euler's Gulch on 15th

Sm. -billed Ani 12 cornfield - didn't notice young as I did last time here.

Piaya cayana 4 forest

Parrots 2 prob. Scaly-headed. Picked in dead snag at cornfield edge on 15th.

Gr.-rump Swift 3 overhead

Stephanois lalandi 1 forest - over "middle" trail on 15th

Trogon surrucana 3 " - calling, saw 1.

Melanerpes candidus 6-8 dead + live standing trees in cornfield on 15th.

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1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay.

5 Feb. (cont.) Thamnochilus caeruleus 6 forest
Tityra inquisitor 2 1 ad./young w/ Myiodynastes along
cross-country trail
Myiornis amicalis 1 over middle trail - coll. on 15th.
Kiskadee 2-4 forest edge
Boatbill 2 "
Myiodynastes maculatus 1 cross-country trail (coll.)
Muscivora tyrannus 1 flew over forest
Unid. swallow 2 overhead
Turdus sp. 1 fruit tree near hotel
Coryphospingus cucullatus 8 tall grass edge clearing.
Hemithrupis guianensis 4 forest
Basileuterus culicivorus 6 " , singing continues
" Troglodytes 2 "
Vireo olivaceus 2 "
Icterus calanensis 1 trees edge of cornfield.


16 Feb. 0800 warm, pt. clear. Went to scrubby pasture.
Talked w/ a ~17 yr. old boy at ~~the~~ Granja La Ponderosa
& he said it was alright to collect in the scrubby
pasture. This pasture is really a # of different
microhabitats. From grazed portions to grass +
weeds 7ft. high. There are scattered trees (Balsa-
like) + bushes + some fairly dense stands. There are
a few standing dead snags. There are some dense

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

16 Feb. (cont.) patches of a 3 ft. fern. Lots of scrubby growth, (some woody, + some forbs) from sparse to dense. I found one area about 10 ft. in diameter that seemed to be a sort of ^{narrow} ~~short~~-leaf cattail, 2-3 ft. high. The point is, then, that this "scrubby pasture" subsumes a # of microhabitats - or a heterogeneous scrub.

I chased the (probable) family group of Mockingbirds, cizzling + not finding one bird. There seemed to be 2-3 young, more brownish w/ streaked upper breast. In general, they had a white supercilious stripe, dk. line through eye, long tails w/ white patches laterally + distally, e.g.  white. I collected a Thamnophilus ruficapillus in some denser ^{weeds + 5'} grass w/ few woody shrubs (6') - it came in to squeaking. I coll. a Verilivornis spilogaster on a 8 ft. woody shrub, seemingly out of place (forest) in the "scrubby pasture". On way home I coll. a Piaya cayana from a tree along road, showing that this sp. also ventures from the forest. For bird list see 17 Feb.

17 Feb. 0815 pt. clear, still + getting warm. Went to scrubby pasture. Not as much activity as yesterday, but it's hotter earlier today (by 5-10°F). Coll. a Icterus caymanensis (1 of 2) from a tree (35') in pasture. Also coll. a ("Baba-like")

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1980

Journal

7

Hotel El Tirol, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

15 Feb. (cont.) Kiskadee from a similar tree. Went next to Becker's Tung & pasture, but saw little (*Leptotila* & *picozuro*). Then went into forest (from Tung). Saw + call, a *Turdus albicollis* + a *T. rufiventris*. Bird-list

16-17 Feb.:

Tinamus sp. 1-2 heard in forest near hotel (the descending guttered call).

Bl. Vulture 2 overhead

Turkey " 2 "

* *Unid. halcyon* - 1 - " scrubby pasture - seemed like a v. lge ♀ *Accipiter striatus* - definitely *Accipiter* shape + flight (like they do when they come out + soar over open country).

Milvago chimachima 2 ad. flew overhead

Falco sparverius 2 (young?) - dead snag in scrubby pasture.

White-tail. Kite 3 on 17th over scrubby pasture.

Columba picozuro 5 overhead - 1 in Tung

Leptotila verreauxi 2 on ground in Tung.

Columbina picui 4 " " edge, ~~tail~~ road

C. talpacoti 4 " "

Pipilo cayana 3 forest; one in pasture (Rue 1292)

S. b. Ani 10 edge, field

Guira Cuckoo 15-25 " " , Tung

Chaetura cinereiventris 2 overhead near hotel

Unid. hammer 1 17th in Becker's forest. Seemed to be crested - 2 central retrics elongated?

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Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

17 Feb.
(cont.)

Trogon surrucura 2 heard in forest
Pteroglossus castaneus 1 fruit tree near hotel.
Colaptes campestris 4 snag in pasture.
Veniliornis spilogaster 1 call. in pasture
Thamnophilus ruficapillus 1 call. " " (see above)
Elaenia sp. 1 fruit tree near hotel
Kiskadee 10 trees in scrubby pasture.

Seemed to be a lot of young activity
on 17th - several in 1 tree calling, bill
clicking - some chasing. Several restless.

see below
↓

House Wren 4 1 singing ♂, edges
Turdus rufiventris 2-4 forest
T. albicollis 2⁺ call. 1 in Becker's forest fairly
dense. See above.
Zonotrichia capensis 4 scrubby field
Sialia flarida 6-10 " " , Tung. A couple
vigorously singing ♂♂, plus stacked
juvs. out of nest.
Coryphospiza curvirostris 10-15 " " . Incl. juvs.
Basileuterus culicivorus 4 forest. Incl. singing ♂♂.
" leucoblepharus 4 " " see above
Icterus cyanus 2-3 scrubby pasture. Call. 1
Chopi Blackbird 5 ♂ " " on 16th.
Landed in trees + responded to my
squawks. Seemed v. restless.
Sol. Laying 2 pasture.

R.M. Zink
1980

Journal

Hotel El Tirol 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

17 Feb.
(cont.)

Scaly-h. Parrot 3 over pasture, 2 prob. on
15th of cornfield.

Boat-billed Fly, 4 forest edge
~~streaked~~

Variagated Fly, 1 back in forest on 18th sort of
an open spot in canopy.

Trop. Kingbird 2-3 trees in scrubby pasture.

Fork-b. Fly, 40 moving through " " in
groups of 2-3 to 10. Many stopping
to feed. Possibly still family groups
or often see 2-3 sticking together
while foraging. Skittish.

Chalk-browed
Trop. Mockingbird 5 scrubby pasture on 16th.

Note that there are still many calls I don't
know, hence these lists are those spp. sighted, i.e., it's
not complete.

18 Feb.

0800 went along road + saw a singing ♂
Sporophila caerulea (RMZ 1299) in a small (6') woody
bush in the scrubby pasture. Also in such a setting I
coll. a young Volatinia (?), a Furnarius rufus; a
Synallaxis spixi was foraging in a 12 ft tree in some
moderately dense scrub of tall grasses. Coll. a Zonotrichia
capensis from a dense stand of 8-10 ft bushes; it was
w/ several other birds. Was a fairly cool, breezy

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1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa Paraguay.

18 Feb. (cont). pt. clear morning - seemed autumn-like. For bird list see 19 Feb.

19 Feb.

0815 Went to Becker's pasture + forest. Coll. a Boat-billed Flycatcher from fruiting tree behind hotel. Coll. a Icterus cayanensis from an open nest in Becker's forest (near frog pond). Rest of birds in my catalogue today were netted. Fairly warm today, cloudy in afternoon. Bird list for 18-19 Feb.

Crypt. tatagua 1 seen near nets by fruiting tree; on ground walking away from me.

bird, sm, gray tinamou 1 flushed from dense grass in scrubby pasture on 18th.

Bl. Vulture 5 overhead

Turkey " 1? "

Picazuro Pigeon 4 " , dead snap-perched

Columbina picin 4 on ground, sm. trees

C. talpacoti 4 " "

Leptotila verreauxi 2-3 on ground in Tur., 2 in open forest near hotel

Piaya cayana 4 forest + edge

Crotophaga ani 10 brush, pasture, forest edge

Guiraca guiraca 25 " " " " . Picks.

Chaetura cinereiventris 10+ over clearing

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Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

- 19 Feb. (cont.)
- | | | |
|------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Trogon surrucama</u> | 2 | calling in forest near hotel |
| <u>Melanerpes candidus</u> | 4 | snaps in open pasture. Gps. |
| <u>Colaptes cafer</u> | 4 | " " " " |
| <u>Furnarius rufus</u> | 3 | coll. 1 on 18 th . Denser scrub. |
| <u>Synallaxis spixi</u> | 1 | coll. in tree in scrubby pasture. |
| <u>Elaenia</u> sp. | 2 | forest edge, fruit tree. |
| <u>Machetornis rixosa</u> | 2 | sm. trees in scrubby pasture. One seen on 18 th had no tail - molting & assume. |
| Kiskadee | 4 | forest edge, fruit tree near hotel |
| Boat-billed Fly | 2 | " " " (coll. 1) |
| <u>Empidonax varius</u> | 2 | open forest at Beckerie. |
| Trop. Kingbird | 4 | trees in scrubby pasture. |
| Fork-tailed Fly. | 30 | " " " " Restless. |
| House Wren | 4 | scrub edges. Some singing. |
| <u>Turdus rufiventris</u> | 4 | forest, fruiting tree. Calls in response to my squeaking. |
| <u>Zonotrichia capensis</u> | 4-6 | dense scrub in scrubby pasture. |
| <u>Sicalis flaveola</u> | 4-8 | Tung; incl. streaked young + 1 vigorous singing ♂. Poss. begging juv. |
| Red-cr. Finch. | 10-15 | scrub. Young fledged + indpt. |
| <u>Volatinia jacarina</u> | 1 | RKZ 1302 |
| * <u>Sporophila caerulea</u> | 2 | coll. 1 (RKZ 1299) on 18 th + in same spot saw another singing ♂ on 19 th . I decided not to collect in hopes of later getting pair for nest. |
| Sayaca Tanager | 2 | in spreading tree at clearing - prob. a pair. |

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1980

Journal

Hotel El Tirol, 230m, 19.5 km by road NWE Encarnación, Dpto. Itapúa, Paraguay.

19 Feb. (cont.) Tachyphonus coronatus 2 near frog pond in Becker's forest.

Gold.-c. Warbler 4-6 forest, 1 singing ♂.

White-browed " 4-6 " 2 " ♂♂.

Icterus cyanensis 3 frog pond in Becker's forest.

20 Feb. Essentially took day off. Went out for 1½ h. from 9:15 - 10:45. Got 0 in nets. Saw ³/₃ Bl.

Vultur, Leptotila verreauxi - in fruit tree near hotel,

Piaya cayana 3 forest, Sm.-b. Ani 10 clearing,

Guiraca guiraca - 10+ hotel, Phaethornis eurhynchos - 1 at

hotel, Colaptes cafer - 2, at clearing, Elaenia spp.

- 1, forest near hotel, Kiskadee - 2, Cliff Swallow - 5,

over clearing, House Wren - 1, singing ♂ at clearing,

Turdus rufiventris, 2 - fruit tree, Gold.-c. Warbler - 3,

forest, White-browed Warbler - 4, forest. Mostly warm

+ overcast all day, little to slight breeze; light shower for 30-60 min in afternoon.

On afternoon net-check I saw a fair bit of activity: pair of Blue-Dacniz, ²⁺ Guiraca Tanager, Red-eyed Vireo, 2 Gold.-c. Warbler, 1 Cyclanthic guianensis - along airstrip trail + made a noise very similar to my "wounded animal" call" (became RMZ 1312), 2 Gray-r. Swifts.

21 Feb. 0830 pt. cloudy, some breeze, rained mod. hard for 30 min. in late afternoon. Went to Becker's in a.m.

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Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
Paraguay.

21 Feb. Coll. 1 of 2 Sayaca Tanagers in a tree at clearing.
(Cont.) Got a Vireo olivaceus near fungus bridge. On way
through Tuny, I saw an intermediate sized dove
fly from the ground to low branch of a Tuny tree.
It dipped its tail + raised head several times. It
proved to be a young Leptotila. For bird list
see 22 Feb.

22 Feb. 0815, Warm, st. breeze + pt. clear all day - no rain.
Went to scrubby pasture in a.m. Coll. a Coccyzus
melacoryphus in shrub along airstrip trail. The
Horned was in a small tree in pasture, as were the
Elanina + Mimus. The Elanina sp. gave a call very
much like that of a Western Wood Pewee; there were 2
birds, seemingly together. The Mockingbird was also by
several others. The specimen I obtained had a rather
extensive (old) wound on its belly - large scar + fatty
material. I suspect it was the same bird I wounded
several days ago + think a pellet ~~large~~ in pectoral
muscle was ~~an~~ previous one. There were a large #
of pigeons (Picazuro) + doves (Leptotila) flying
around; they seemed to be post-breeding flocks.
The hummingbird (RM21323) was collected
during evening net check at N end of gravel pit
in the area of young saplings.

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1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Ppto.

Itapúa, Paraguay

22 Feb. Bird list for 21-22 Feb.

(cont.) tinamon 1 flushed from scrubby pasture. The bn.
one of bawing (dorsally) that whistles when
it takes off.

Whistling Heron 6 - yf. flew over Becker's pasture

Bl. Vulture 4 over hotel

Turkey " 4 " "

Roadside Hawk 1 heard at Becker's

Milvago chimachima 1 1 ad. along airstrip trail

chimango caracara 1 Becker's pasture. Had quick
but fairly good look. Definitely
a caracara - larger & darker than
M. chimachima, immature (certainly
not ad. ").

Sparrow Hawk 1 Becker's pasture - snag.

Picazuro Pigeon 25 scrubby pasture - flying
around in flocks of five to 10.

Picus Ground Dove 10 sn. trees, road (calling)

Ruddy " " 10 " " "

Leptotila verreauxi 10 1 juv. in trees, yf. in pasture

Parrot - prob. Scaly-headed 11 flock over gravel pit on 22nd

Coccyzus melacoryphus 1 airstrip (collected)

Squirrel Cuckoo 4 forest

Ani 20 edge

Guiraca Cuckoo 30 " , total. Look v.
ragged (& molting).

Journal

Itapúa, Paraguay.

Chaetura cinereiventris 10 overhead

Number 1 Plot 1323 - gravel pit

Chestnut-colored Aracari 2 fruit tree - wing 22^{cm}

Colaptes cafer 6 songsters in pasture.

Rufous Horned 2 scrubby pasture-sm. trees

Synalaxis sp. 3 forest. Appeared to have 1 or 2
wing bars & streaked heads. Used
call - insect-like 2 part call.

Variable Antskrike 3 heard in forest

Chroxiphia caudata 1 forest (sub ad. ♂)

Elania sp. 2 scrubby pasture - see above

Kiskadee 6 forest edge

Boat bulled 4

Empidonax varius 2 spec.

trap king bird 3 trees in scrubby pasture

* Fork-t. Fly.	5	" "	" "	Notably fewer than previous days
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Swallows 5 unid. - prot. Chiff

House Wren 5 scrub, roadside

Trachurus rufiventris 3, first edge

Mimus saturninus 3 trees in scrubby pasture. Call
not a blackbird like, hoarse
"chek."

Zonotrichia capensis 4 brush

Sisatis flavescens - 3 Tang Rd

Red-a. Finch 15 brush

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1980

Journal

Hotel El Tirol, 230m, 19.5km. by road NNE Encarnación, Dpto.
Itapúa, Paraguay.

22 Feb. (sat) Volatinia jacarina 2 ad ♂ + imm. or ♀ in sn. tree
in brushy part of scrubby pasture.
Sporophila caerulea 1 ♀ roadside eating weed seeds
Guiraca Tanager 3 dead tree
Sayornis Tanager 2 seen above
Euphonia chlorotica 5 ♂, ♀, 3 juv. in dead tree along
avistrip. ♂ was moving along branch
dropping rear (forcefully) in some distant
Gold-w. Warbler 5 forest
White-br. " 5 "
Vireo olivaceus 3 "
Cyclanthis guianensis 1 " at Becker's
Cyanocorax chrysops 2+ " " "

23 Feb. 0815. Warm & hot, pt. clear & sl. breeze. Went
to cornfield via avistrip or cross-country
trails. There were a couple periods of high
bird activity, but much was high in canopy &
I couldn't see much of it. I coll. a Leptopogon
from some brushy undergrowth at a fairly open
spot along trail; it was w/ another bird. By
0930 or so activity seemed to dwindle due
to the heat. For bird list see 24 Feb.

24 Feb. Went to scrubby pasture, Becker's pasture,
Becker's forest. 0815 sl. breeze, ~cool; by 1100

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1980

Journal

Hotel El Tirol, 230m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

24 Feb. (Cont.) it was cloudy + threatening rain. It rained for a couple h in the afternoon. In the e.v. I was impressed by the low level of bird activity; there was little about + moving. Especially noticable was the apparent lack of Fork-tailed Flycatchers, a species seen in this pasture in migrating flocks commonly the past 2-3 weeks. I coll. an Ani from a flock of 10 in some dense 10 ft. brush. A House Wren was coll. from a similar, sparser, situation. I did see a flock of 3 ibises (all dk. brown, fairly sharply decurved bills), 5 lapwings (which didn't stop in Becker's pasture), 26 long-tailed parrots. In early evening I found 3 thoroughly soaked birds in the nets: Schiffornis, Corophaea + a Thamnoph. l. caeruleus which was discarded. By the evening it was v. foggy.

Bird list 23-24 Feb.

Tatanga Tinamon 1 seen on ground near nets. Have not heard one call for several days.

Unid. " - sm. gray sp. flushed from dense grass in scrubby pasture.

Bl. Vulture 3-4 overheard

R.M. Zink
1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto.

Itapúa, Paraguay.

4 Feb. (cont.)	Turkey Vult.	2	overhead
	Unid. 1673	3	flock " - see above for details
	White-tailed Kite	1	perched snag at cornfield
	Falco sparverius	1	" " " scrubby pasture
	Picazuro Pigeon	10	overhead, perched snags.
	Picui Ground Dove	5	scrubby pasture, road
	Talpacoti	5	" "
	Leptotila verreauxi	5	forest, Tuny
	Picus maximiliani	3	cornfield
	Long-tailed Parrot	11	on night of 23 rd - could say all underwing linings. Saw flock of 26 on 24 th .
	Yellow-billed Cuckoo	1	along airstrip trail
	Squirrel Cuckoo	3	forest
	Ani	15	scrub
	Guiraca guiraca	25	" Tuny, forest edge
	Gray-r. Swift	5	over clearing
	Picumnus temminckii	2	heard in forest (one seen)
	Colaptes campestri	3	snag in pasture.
	Sitta carolinensis	1	forest
	Funariidae rufus	1	clearing
	Philydor sp.	1	forest sub-canopy.
	Thamnophilus caeruleus	3-4	" (heard). / heard
	Chamaea campanison	? 1	heard in forest
	Chiroxipha caudata	2-3	" " "
	Elania sp.	1	seen in scrubby pasture. Same as RMZ 1321

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay.

24 Feb. (cont.)	<u>Leptogogon amaraecephalus</u>	2	coll. 1; forest
	<u>Phylliscardes</u>	sp.	1 forest canopy
	Kiskadee	3	scrub (s.m. trees)
	Boat-billed Fly	3	forest edge
	<u>Myiarchus</u>	sp.	1 gravel-pit edge
	House Wren	4-5	scrub. Some singing over.
	<u>Turdus rufiventris</u>	2-3	fruit tree
	<u>Zonotrichia capensis</u>	2-3	brush in scrubby pastures.
	<u>Sicalia flaveola</u>	2-3	Tung
	Red-cr. Finch	4-8	scrub, road edge
	Sayaca Tanager	1	fruiting tree near hotel.
	Gold-cr. Warb.	5	forest
	White-cr. "	5	"
	<u>Vireo olivaceus</u>	5	" , Saw several chases plus a begging juv. following an adult.
	<u>Cyclarkis guianensis</u>	2	forest

25 Feb. Very foggy 0730-0830. Spent a.m. along airstrip trail & at gravel pit. There was a fair bit of activity after the fog lifted. Coll. an Empidonax varius from the saplings at gravel pit. I saw 2 birds in a standing dead snag that I thought were larger than what they

R. M. Zink
1980

Journal

Hotel El Tirol 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

- 25 Feb. (cont.) proved to be: Turdus rufigaster (RMZ 1332) & walked to clearing & got a Thraupis sayaca from a tree bordering clearing. For bird list see 27 Feb. Pt. cloudy, hot afternoon (w/ cloud build up, as is usual these days). RKT returned from stats
- 26 Feb. 0830 - somewhat foggy. Walked to Becker's pasture & forest. Coll. 1 Kiskadee. Not a lot moving today. For bird list see 27 Feb.
- 27 Feb. 0730 quite foggy. 0830 went to clearing & scrubby pasture. Got a Zonotrichia capensis from shrub along road - there were 3⁺ others. Coll. the Thraupis sayaca from a 20 ft. tree in pasture, where it was foraging with two other birds. Also got a Boat-billed Fly from a small grove, 25 ft. trees, & one from tree bordering clearing. The Porophila caerulea was in a bush in some dense grass-
scrub - there were 4⁺ others. Was told not to hunt in scrubby pasture by owner of Granja La Ponderosa
Bird list 25, 26, 27 Feb.
Tatapan Tinamou 3⁺ saw several (3) prob. young in open part of forest. They walked away quickly & quietly before I could shoot & seemed to disappear.
"Gray-grassland tinamou" 3⁺ tall grass - decaying all like Tatapan
"streaked/brown" " 3⁺ " " - whistles or flushes.

R. M. Zink

Journal

1980

Hotel El Tirol, 280m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

27 Feb.
(cont.)

unid. hawk 1 circling over clearing - looked like
♂ Cooper Hawk size, with narrower wings.
Seemed v. worn + molting. Tail long w/
narrow bands.

unid. Falco 1 perched in dead snag - certainly
a Falco + not F. sparverius - but only
saw briefly as it hunted tinamous.

Falco sparverius 1 snag in pasture.

Milvago chimachima 2 ads. perched snag

Odontophorus capueira 1? - flushed along airstrip.
d'd think 90% certain.

~~long-tailed Parrot 26~~

small short-tailed Parrot 2 high over clearing

Scaly-headed " 3 " " "

Picui Ground-dove 10 shrubs, roost (calling).

Tatpaci " 10 " "

Leptopoda verreauxi 3 forest

Picazuro Pigeon 20+ flocks in scrubby pasture.

Ani 15+ scrubby pasture, clearing

Guiraca guiraca 20 " "

Piaya cayana 2-4 forest, edge

Gray W. Swift 6 over clearing

Trogon sururus 1 head forest

Melanerpes candidus 4 over scrubby pasture, snags

Colaptes cafer 6 " "

Furnarius rufus 3-5 scrubby pasture, clearing

* see end
of list

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

27 Feb.	<u>Thraupis caerulea</u>	3	heard in forest
(cont.)	<u>Tityra</u> sp.	2	Beck's forest - in dead snags above (30'-40') canopy
	<u>Elania</u> sp.	1	brush + sm. trees in scrubby pasture (same as RME 1321)
	Kiskadee	6	trees in pasture, forest edge
	Boat-billed Fly	5	" "
	<u>Myiodynastes maculatus</u>	1	tree near road - (on 25th) - pot
	Troy Kingbird	2	sm. trees in scrubby pasture.
	Fork 4. Fly	5	" "
	<u>Progne chalybea</u>	4	over clearing
	Swallow	4	" (prob. cliff)
	House Wren	10	scrub, road edge, forest edge
	<u>Turdus rivianus</u>	2	fruit tree near hotel
	<u>Zonotrichia capensis</u>	10	scrub shrubs in pasture + road edge.
	<u>Sialia flaveola</u>	5-10	" " "
			Tree edge
	<u>Coryphospiza cucullata</u>	15	scrubby pasture
	<u>Sporophila caerulea</u>	5	" " section
	<u>Hemithrax quira</u>	4	fall trees at forest edge
	<u>Sayornis nigricans</u>	4	" " "
			+ sm. (25') trees in pasture
	<u>Dacnis cayana</u>	2	off " "
	<u>Basileuterus culicivorus</u>	4	forest
	<u>B. leucoblephorus</u>	4	"

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Ppto. Itapúa, Paraguay.

27 Feb.
(Cont.)

Parula Warbler 2? forest edge clearing. Seem to have a dk. cap + white patch on wing - red bit Parula -

Vireo olivaceus 2 forest

Tachycineta thalassina 1 tree in pasture

Chopi Blackbird 50 Tung

I also saw 2-4 unid. Siskins in small (20') trees in scrubby pasture; I heard siskin-like calls + saw clearly the yellow wing patches both on perched + flying birds. * Found remains of a Yellow-billed Cuckoo on path - no question as to sp. as the head + most of feathers were on ground; obviously eaten by a predator.

28 Feb.

0830 warm, pt. cloudy + some breeze. Hung around gravel pit + airstrip trail as gut not A-1. Coll. a Phylloscartes in the stand of saplings at gravel pit. There was a fair bit of activity, but I quit early. Felt better by afternoon so went to clearing about 5:00 p.m. Very few birds moving as it was still hot. I heard a strange (for hear so far, for me) call note - it proved to be a Geothlypis sp. (Rus 1347). It was in the dense weeds / small shrubs bordering clearing. For bird list see 1 March.

R.M. Zink
1980

Journal

Hotel El Tirol, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

29 Feb. [Note - I've walked through gravel pit at least 1x per day for past week looking for ^{Brown-striped} tinamous but have seen none].

0815 Went to cornfield via airstrip + cross-country trails. Found several pockets of activity in forest, including my 1st look at a spadebill - it was 4-5 ft. in shrub undergrowth + foraging. Along cornfield edge I ran into a fantastic assortment to spp. moving through some tall trees incl. cone-bills, Guira Tanagers, 2 scissors, 3 Colonias, 2 Tersina viridis (200), Sayaca Tanagers, Philydor sp., Tityra inquisitor ~~1st~~ + T. cayana (?), Sittasomus grisei-capillus (lower, ^{+ House Wren} under main flock), several flycatchers (prob. Phylloscopus, Elaenia (?)), Myiodynastes +/or Empidonax, 2 Pacnis cayana, 2-3 Vireo olivaceus.

I collected the Sayaca Tanager + Conirostrum from this assemblage (also the Colonias). I got the Tachyphonus at the foot of the airstrip trail in a dense tangle of saplings. The Thamophilus was w/ a flock of birds in the forest. For bird list see 1 March.

1 March 0815 Went to Becker's pasture forest + the cornfield beyond + returned via pasture w/ spring along road (next to Becker's). Saw a fair amount of activity. Got the Philydor

R. M. Zink
1980

Journal

Hotel El Tirol, 2200m, 9.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

1 March
(cont.)

♂ Tricothraupis melanocephala from ~15 ft. up in Becker's disturbed forest, near stream (disturbed in sense that most undergrowth has been removed by cattle trampling). On way home saw a flock of what I hoped were siskins in tall weed along road & shot into flock - they proved to be a flock (7-8) of young Siskins (RMR 1353-4). I coll. the Picui Ground Dove on open ground in clearing. It rained hard in afternoon.

Bird list 28 Feb. - 1 March:

Tatoua Tinamon 2 heard forest

Black Vulture 4 overhead

Turkey " 2 "

Roadside Hawk 1+? heard Becker's

Falco sparverius 2+ snags in cornfield near

Becker's. Seen to be completely
molt - compared to ones 2 wks. ago.

Swallow-tailed Kite 6 - 6 in view at outline of
cornfield near Becker's.

Picui Ground Dove 10-15 calling road edge

Talpacoti " " 10-15 " " "

Leptotila verreauxi 4 forest calling

P. caerulea Pigeon 2 overhead

Geotrygon violacea 1 forest (Tirol) near cornfield

Sayornis b. Ani 15-20 edge

Guiraca Cuckoo 20-25 " " " "

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km by road NNE Encarnación, Depto. Itapúa, Paraguay.

1 March Squirrel Cuckoo 2 forest
(cont) Gray-r. Swift 6 overhual (2 into Tiro chimney on 29 Feb.),

Phaethon eurynotus 1 Tiro on 1 March

Stephanoxis latardi 2 Grand pit (incl. ad. ♂).

Trogon sururus 2 Beck's forest on 1 March.

Answered my imitation + came in;
looked very ragged.

Baryphthegus ruficapillus? 1 forest on 29 Feb.

Veniliornis spilogaster 1 " near Cornfield (Tiro).

Picumnus temminckii 2 " " "

Colaptes cafer 4 clearing

Sittasomus griseicapillus 1 forest

Cephalocolaptes fuscus? 1 "

Furnarius rufus 3 scrubby pasture (along).

Synallaxis sp. 1 forest

Philydor 1 " (= RMZ 1318).

Philydor sp. 1 Beck's forest (= RMZ 1357).

Thamnophila caerulea 6 forest. Very responsive

to squeaks. A lot appears to
be most common bird in forest
at this time (perhaps ~ to Basilinna
sp.).

Tityra inquisitor 1 edge of Beck's forest.

T. carolinensis 3 " of cornfield + Tiro forest.

Chlorophia candida? 2+ heard Tiro forest

Phylloscopus spp. 2 coll. + saw (others in forest).

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

1 March
(Cont.)

<u>Spadebill</u>	1 or 2	forest undergrowth
<u>Sirystes sibilator</u>	2	cornfield edge - high in dead snag.
<u>Kiskadee</u>	6	edges
<u>Boat-billed Fly</u>	6	"
<u>Myiodynastes maculatus</u>	2	cornfield edge
<u>Empidonax varius</u>	3-4	" " ; Beckers
<u>Trogl. Kingbird</u>	4-6+	cornfield edge at Beckers ^{pass. migrant} groups
<u>Progne subis</u>	4+	overhead
<u>Cliff Swallow</u>	4+	"
<u>House Wren</u>	5	edges, sing ♂♂
<u>Turdus rufiventris</u>	4	forest
<u>T. leucomelas</u>	2	forest edge at Beckers
<u>Zonotrichia capensis</u>	6	Tirol cornfield, scrubby pasture
<u>Sicalis flaveola</u>	8+	Tiny, weedy roadside
<u>Coryphospingus cucullatus</u>	8+	" "
<u>Sporophila caerulea</u>	1	♀ in top (!) of tree at clearing. Seemed very nervous.
<u>Guira Tanager</u>	4	high in trees bordering cornfield
<u>Tachyphonus coronatus</u>	1	dense sapling growth at foot of airstrip trail.
<u>Trichothraupis melanocephala</u>	2	Beckers "disturbed" forest
<u>Sayaca Tanager</u>	6	tall trees at forest edge
<u>Dacnis cayana</u>	4	" " " "
<u>Conirostrum speciosum</u>	4	" " " "

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

1 March
(cont.) Tersina viridis 2-3 tall trees conf. edge
Parula pitiaurus 4 dense scrub at forest edge
at Becker. Appeared to have
finished molt.

Basileuterus culicivorus 6 forest; singing

B. leucobrythos 6 " "

Geothlypis sp. 1 coll. at clearing edge.

Vireo olivaceus 6 forest. Still a few
singing.

Chigi Blackbird 8+ conf. at Becker. A
couple of ♂♂ seen to be singing.

2 March Spent day at hotel; rained throughout
most of day. Saw 5 swifts (Chaetura cinerata)
enter chimney at hotel around 7:00 p.m. Saw
4 night hawk sp. over hotel around 7:15 p.m. ~~Clearly~~
Clearly flew like night hawks, undulating +
erratic, but I could see no field marks.

3 March Went to Salvador's field ⁰⁸¹⁵ ~~0815~~ partly
breeze. Still wet + sloppy from past 1 1/2 days
of rain. Talked to Sr. Salvadore afterwards
he said I could hunt there whenever I wanted.
There are a # of different habitats on his
property. Included are old cornfield, tall
grass/weedy patches, forest (from dense sapling +
shrubs to primary forest), Tung, beans, + lots of

R.M.Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto Itapúa, Paraguay.

3 March
(cont.)

of standing dead snags. Saw a flock of 15-20 Leptopila verreauxi on ground (cleared) between rows of young Tinny trees - coll. 1 (RMZ 1358). I got a Turdus rufiventris from some dense woodland scrubby tall grass/weed undergrowth - same place for the Myiornis auricularis (it was foraging from 3 ft. bushes). I coll. a Cliff Swallow (RMZ 1360) from a flock of 10-15 which circled over a (1/2 ha) grassy area. As before, I flushed several tinamous (sm. gray ones), whose call is reminiscent of Crypturellus tataupa. It starts w/ a series of spaced whistles, which get higher + closer together + then descend; there are some guttural clucks at end also. For bird list see 5 March.

4 March.

Went to cornfield via airstrip + cross-country trails. Ran across a fair bit of activity in forest. Just above the "two log bridge", at a concentration of the recently appeared orange pea-like fruit, I flushed 3 Guans which took off before I realized what happened. Also near two-log bridge I heard a noisy bird in canopy, possibly 2 birds, which proved to be a Red-rumped Cacique (RMZ 1368). There

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5km by road NNE Encarnación, Dpto. Itapúa, Paraguay.

4 March (cont.) was not too much moving at the cornfield. In forest on way back (via Middle Trail) I coll. a Phylloscopus scissus from an area of fairly open forest (at least understory) w/ some vines. Near Enteri Gulch I saw a group of 5-7 Philydors (RMZ 1366) which seemed a bit odd to see that many. I coll. a Synallaxis (RMZ 1367) which had been calling (+ me imitating) for 5 min. The call is a nasal buzzzz, buz-whit (—••). I also coll. an Elaenia in the saplings at gravel pit (RMZ 1364). For bird list see 5 March.

5 March Went to clearing Becker's postwar forest. Along airstrip trail coll. a juv. finch (RMZ 1370) which was giving food begging calls. I tried to see adult but there were no other finches in area. In fact, the bird seemed to be following (and attended?) by an adult Basileuterus culicivorus (which was chasing a Parula Warbler). Near the pond in Becker's forest I coll. a Myiarchus - it was not calling. Near the bull-horse pasture (w/ temporary shelter), in an area of open 2° forest, I flushed 2 caprimulgids. They seemed to be Parnassius - one had white patches near wing-tips + tail + in the other they were cream colored.

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

5 March
(Cont.)

The bird w/ white wing patches would fly a few feet + alight on ground. It jumped its head up + down. They looked very much like the specimen we netted a few days ago (W/C).

Bird List 3-5 March

Tatagua Tinamou 3⁺ heard at cornfield edge near hotel - note I had not heard one for previous 10 days or so.
"Barred Tinamou" 1 flushed along airstrip trail, near gravel pit. The bird flushed from a few feet away + flew out over forest (!).
"Grayish Tinamou" 5 Flushed at Salvador's field + cornfield (call described above).

Black Vulture 5 overhead
Turkey " 5 "
Roadside Hawk 2 - saw 2 on 3rd + 4th, plus heard at cornfield on 4th. Poss. pair or ad./young at Beckers/Salvadors.
Sparrow Hawk 3⁺ 2 together on snags at Salvador's field; one at cornfield on 4th.

Milvago chimachima 2 2 adults at Salvador's.
So. Lapwing 1 high overhead
Scaly-headed Parrot 2 perched high in dead snag at Salvador's.

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

5 March Picui Grand Dove 10⁺ along road, edges, scrubby pasture
(cont.) Talpacoti: " " 10⁺ " " " " " "

Also noticed a fair # of these in weedy
old cornfields (I think far if any
Picui.).

Leptogtula verreauxi 20 flock at Salvador,
lots of flying groups, couple in
Tung forest.

Picazuro Pigeon 10-20 " "

Geotrygon vidua 1 Tiro forest near
Euleri Gulch, die flushed a
bird from near pool of water
almost every time I pass
this spot.

Pendolope superciliosa 3 Flushed 2x from
concentration of the orange, pear-
shaped fruit. see above.

Smooth-b. Ani 20 flocks in brush, forest edge

Guiraca Cuckoo 15 " " "

Piaya cayana 5 forest

Pampaque? 2 Becke's ^{on 5 March} - see above

Gray-r. Swift 10 overhead, chattering. St. V/
using Tiro chimney ^{for} roost.

Phaethornis eurynome 2 near hotel (fleeing
at Fuschia).

Stephanoxis lalandi 7 forest, sagging at ground
pit (saw 2 ♂♂ there).

R.M. Zink
1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

5 March
(cont.)

Trogon surrucura 2⁺ forest at Becker's. Collected in 2 on 5th March.

Melanerpes candidus? 2 heard on 4th.

Colaptes cafer 2-4 snags at Salvador's. Seen to be fewer these days.

Furnarius rufus 3⁺ heard in scrubby pasture.

Synallaxis sp. 21 forest (RMZ 1367)

" sp. 21 saplings at Becker's - plain (like one NK5 got in net on 5 March).

Philydor sp. 5⁺ (RMZ 1364) See above.

Thamnochlorus caeruleus 5⁺ forest.

Elaenia 1 sapling at gravel pit (RMZ 1364).

Phylloscopus eximius 1 RMZ 1363, see above

Myiornis auricularis 1 RMZ 1361 " "

Myiarchus tuberculifer 21 RMZ 1369

Kizkader 6

Boat-billed 4

Myiodynastes maculatus 2 saplings at gravel pit

Empidonax varius 2 " "

Trop. Kingbird 2 scrubby pasture on 3rd

Cliff Swallow 1045 see above

House Wren 5 edge of forest, scrub

Turdus rufiventris 2 young forest - see above

Zonotrichia capensis 5 scrubby road-edge

Sicalis flaveola 2 " "

Coryphospingus cucullatus 10 " "

Guira Tanager 5 forest edge, high

R.M. Zink
1980

Journal

Hotel El Tirol, 230m. 11.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

5 March *Parula pitiaayoma* 2⁺ anting trail
(Cont.) *Basileuterus culicivorus* ~~25~~ 5 forest, singing \Rightarrow
B. leucoblepharus 8 " "
Vireo olivaceus 5 " "
Cacicus haemorrhous 1 forest (RMZ 1368)

In the evening I walked to Becker's pasture & waited at clearing until dark. At 6:00 p.m., when I left hotel, it was hot & still. There were few birds moving. I saw a Whistling Heron at Pasture. At the clearing I saw a Mitrospiza chrysolaema (adult) fly overhead. Towards nightfall I heard, under large spreading tree at forest/clearing edge, a bird w/ a loud highly variable song. It seemed to be a mixed thrush-caprimulgid - ? It had musical passages, clear tones, ascending wheezy notes, + - all quite loud. I also saw a caprimulgid at dark fly along clearing edge. It was not a night hawk or Pauraque, but sort of slender + night hawk (Lessa) size.

6 March 0800 Went to cornfield via anting + cross-country trails. It was pt. clear no breeze + warm; later it became hot, humid + stifling.

R.M.Zink
1980

Journal

Hotel El Tirol, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

6 March
(Cont.)

There were a couple periods of activity in the forest incl. Automeris ^{leucophthalma} & Philydor sp., Sittasomus grisecapillus, Picumnus terrinckii, Veniliornis spilogaster. I heard a Chamaeza campanisona but it would not show itself. The cornfield was hot but there was some activity along the forest edge: Dacnis, Troglodytes kingbird, 2 Colonia colonia, Turdus sp. On way back at cornfield-forest edge I shot at a Motmot (Baryphthengus ruficapillus) which was in a vine tangle, but missed. The walk back to hotel was v. hot & there was little moving. In fact, it was as still this afternoon as the seen other, birdwise that is.

[note - yesterday I saw a small hummer, green w/ a coppery tail, bill pale basally, which was chasing a hermit (Phaethornis lucynome) + vice versa, at the Fuchsia flowers at hotel].

7 March

Got a late (0830) start. I walked along the small drainage ditch, behind rooms to the "reservoir". They have recently widened (to 1½ ft.) the channel + it was clear of leaves + sticks. This allowed a very ~~short~~ silent walk through forest; I believe this allowed me to surprise a Crypturellus tatana, which I saw walking away from me

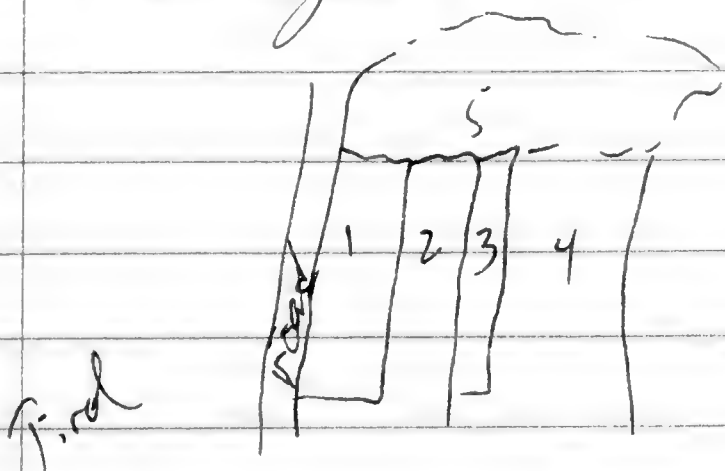
R.M. Zink
1980

Journal

Hotel El Tirol, 230m. 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

7 March
(cont.)

through a fairly open spot on the forest floor (I also heard it as it moved through dry leaves). It proved to be a ♂ (RMZ 1373). I continued on to the reservoir, which had little water (50 x 7 ft x 5 in.), & coll. a ♂ Tachyphonus coronata in the dense sapling growth along the reservoir. I returned to room to leave finamou + tanager. When I walked along the net lane behind hotel, as Ned + I have done 2x each per day for bats, a Microstus ruficollis (RMZ 1372) perched on a left ^{high} branch over path next to net. It did a couple nervous head pumps during the second a time I watched it. It is an immature ♂ and is the second specimen for study, both (RMZ's of a few days ago) immatures + in areas well searched for a long time. Apparently we're seeing dispersal of young. I spent rest of a.m. at Becker's - there was little activity. I went to a new area for me beyond Becker's:



- 1 = Becker's Tung orchard
- 2 = " pasture
- 3 = another Tung (catal)
- 4 = large field
- 5 = forest, remnant - disturbed

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

7 March
(cont.)

The large area of fields (#4 on map above) has lots of snags & looked great for birds - I think another time of day would be better than the 1030 time I visited it. I returned to area in Becker's property where I flushed three caprimulids on 5 March (see journal) but found nothing. Along road on way back I ran into some activity incl. Trog.

Kingbirds (coll. 1, RMZ 1375), Turdus rufigiventris, Kiskadee, +. The birds were in an area of Cecropia & other similar trees & fairly dense underbrush bordering road & pasture. For bird list see 9 March.

8 March.

Ned & I went to Salvador's fields. There was a lot of activity, early (~0830) along a strip of brush & sm. trees bordering pasture that incl. several Trog. Kingbirds, 1 Cattle Tyrant (RMZ 1377), Chalk-browed Mockingbird (the one I wounded on 11 Feb. still w/ obvious broken leg), several Sicalia flavedula & Coryphospingus cucullatus, Aris, Guira Cuckoos, +. We flushed 1 barred brown Tinamou & 2 smaller gray-brown sp.?. In some young corn & weeds I flushed a tinamou 6 ft. away. It stayed on ground running around seemingly randomly, while I eventually tried to get a 38 in gun. I

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5km by road NNE Encarnación, Dpto. Itapúa, Paraguay.

8 March
(cont.)

didn't in time it got away. It looked very much like a Tatanga Tinamon, but specimens are needed to verify this. However, it does add to my growing suspicion that this species, in forest at Tirol, also occurs in grassland (as Short [1975] suggests in the "how page"). In all, after the morning flurry, there was not a lot of activity. I went to check nets & on way back to hotel collected a Pteroglossus costaricensis from a group of 3 in the fruit tree near hotel. In evening I checked net including a spin through grass pit (as I did this a.m.), but saw v. little. For bird list see 8 March.

9 March.

Took day off. I checked net in a.m., plus a walk through grass pit & along channel to reservoir. Saw little.

Bird list 7-9 March

"Brown-banded" Tinamon 1 flushed from short grassy area at Salvador. This sp. seems to favor shorter grass/weeds than the gray brown sp. that also occurs in this field.

"Gray-brown" tinamon 2 Salvador field

Tatanga Tinamon 2 (coll., 1 other heard)

Black Vulture 2-4

R.M. Zink
1980

Journal

Hotel El Tirol, 230 m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

7 March
(cont.)

Turkey - Vulture ?	1	
<u>Buteo magnirostris</u>	2-3	(calling) Beck's, Salvador
<u>Falco sparverius</u>	2	Salvador - snags.
<u>Microsternus ruficollis</u>	1	coll. RMZ 1372
<u>Oreotyrannus cyaneus</u> ??	1	flushed at reservoir on 9 ^B
Picus Ground Dove	10	edge, road
Talpaoti	10	" = Salvador com
<u>Leptotila verreauxi</u>	6-10	Salvador com, forest
Picazuro Pigeon	5	overhead, Tung
Ami	20	groups, edges
Guinea Cuckoo	20	" "
Squirrel	5	forest, scrub (dense)
<u>Chaetura cinereiventris</u>	5-8	overhead
<u>Stephanoxis lalandi</u>	2	airstrig trail
<u>Pteroglossus castaneus</u>	3	coll. 1, fruit trees by hotel
<u>Colaptes campestris</u>	3	snags in Salvador pasture
<u>Furnarius rufus</u>	3	brush at Salvador.
<u>Synallaxis</u>	1	heard on 9 th in forest (same sp. as RMZ 1367).
<u>Thamnottilus caeruleus</u>	4	heard in forest
<u>Phyllorhynchus</u>	1	forest
<u>Machetornis rixosus</u>	1	coll. see above
Kiskadee	4	
Boat-billed Fly	2	
Trop. Kingbird	6-10	seem to be increasing
House Wren	4	edge, singing
<u>Turdus rufiventris</u>	2	forest

R.M. Zink
1980

Journal

Hotel El Tirol 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

9 March Turdus leucomelas 2 dense scrub at Salvador.

(Cont.) Zonotrichia capensis 4 " " " "

Sicalis flaveola 4 " "

Coryphospiza cucullatus 10-15 " "

Sayornis Tanager 2

Basileuterus culicivorus 4 forest

B. leucoblepharus 5 " "

Geothlypis 1 dense grass at Salvador
(coll. MKJ on 8 March)

Gnorimops chopi 10 snags at Salvador

Icterus cayanensis 2 dense brushy m. trees at Salvador.

[also, I saw 2 So. L. quins on 7 March high over Becker's pasture.

- up in last week, we've heard Glaucopteryx brasilianus 2X at dinner. We also saw a small Accipiter over Tirol at 2:00 p.m. on 7th.

- also, on 8th (?) over Tirol, saw 2 large falcons overhead.

It rained hard on afternoon of 9th, after being very hot during day.

10 March Went to Becker's in a.m., including both patches of "Tung, pasture forest w/ "frog pond" + "cow horse" pasture. Not a lot

R.M. Zink
1980

Journal

Hotel El Tiro, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

10 March
(cont.)

moving, which seems typical of late. I coll. a Trichothraupis melanocephala in the far Tung orchard (not Becker's), which was with a group of Coryphospingus cucullatus at the Tung/forest edge. I then heard a loud, raucous series of calls which I guessed were guans. I approached the area, at the "Fungus Bridge", + continued to hear, but not see, 2 pairs. The birds were in the dense forest undergrowth along the stream (flowing quite strong because of recent rains). Later Ned suggested they might have been woodrails, a suggestion I can't refute. I coll. a Ideris cayanensis along forest/Tung edge at lower end of Becker's Tung orchard. I then went through forest, at Becker's, + corn/soy pasture to the area of saplings near stream. There I coll. a Trogon surrucura which had perched about 8 ft. off ground on limb of a small tree. For bird list see 11 March. Rain in afternoon (very hard).

11 March.

Went to cornfield via airstrip + cross-country, plus stopped gravel pit. At the lower forest net I coll. a Leptotila verreauxi, which I thought might have been a Geothlypis sp. There were a couple pockets of activity

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km by road NNE Encarnación, Dpto. Itapúa, Paraguay.
11 March (cont.) in the forest, but # of birds is definitely lower than before. In the forest, below line 4, at a fairly open (esp. mid-level) part of forest, I coll. a Trogon rufus. It was perched ~25 ft. on a limb. I think there was another bird present. The call was very "trogon-like" but weaker + shorter duration than T. surrucura. I believe the individual I shot had been chased by a ~~M~~ Myiodynastes maculatus. I continued through cornfield + out the NE end towards the group of huts. I encountered a group of 4 Cactus haemorrhous at the forest edge. I shot 1 but it escaped in some dense undergrowth. I coll. a Guia Cuckoo from a group of 10-15 which were feeding on ground in an overgrown patch of young corn (NET prepared the specimen). It rained in afternoon + evening. We went to Lou _____ horse, in _____ for dinner.

Bird list 10-11 March

Tataupa Tinamon 2⁺ heard in forest, plus one from grassy forest edge.

Syrigma sibilatrix 2 feeding in wet, tall grass at lower end of Becker's pasture. Flushed (2 or 3 times) + left as if paired.

Bl. Vulture

2

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

1 March
(cont.)

Turkey Vulture 2 overhead

Roadside Hawk 1 heard at Beck's forest

Swallow-tailed Kite 4 perched 1/2 dead standing
snag in scrubby pasture.

Falco sparverius 1 ♀ Tirol on TV antenna

Parrots 7 flock at cornfield. They
seemed to be Pionus build,
but I don't think they were maximiliani,
as they seemed smaller & browner. I
had fairly good look & couldn't see light
head patch. Tail Pionus-like.

Picui Grand-Dove 4 usual places.

Talpacot: " " 4 "

Leptotila verreauxi 2-3 forest

Picazuro Pigeon 3 Tim, overhead

Ami 20 edge

Guira Cuckoo 20 "

Squirrel " 2-4 forest ^{one} molting tail

Chaetura cineriventris 15+ over field below cornfield
on 10th.

Phaethornis eurynome 1 One bird (?) persistently
visits flowers outside hotel rest
aurant; on orangist. flower on
bush - Fraschia-like. Wine had
excellent looks at bird during meal.
It comes & visits a few flowers,
leaves & returns 5-10 min. later. It

R.M. Zink
1980

Journal

Hotel El Tirol, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

11 March P. euryzona (cont.)

(cont.)

(or feeding
young)

seems a bit strange it doesn't visit all the flowers at the patch during our visit, but apparently there is good reason not to spend too much time in one place at a time. The most interesting aspect of these visits is that we've seen clearly that the bird is "stealing" nectar. I have seen this species feed by ~~prope~~ probing flowers "normally", but this bird (one?) pierces the corolla near its base - presumably near nectaries. I dissected a flower & it seemed the bird was piercing middle of corolla, i.e. not quite at nectaries, but perhaps its "short-stopping" nectar ~~flow~~ flow.

On 11/3 I checked the presumed Phaethornis euryzona nest at pool at "two-log bridge". The rains of recent were apparently too much as the 2 young were dead & the nest wet (see NK's notes for nest site description). I heard this sp. calling when I was investigating nest - further strengthening our view that the nest was of this sp. The young were ~ $\frac{2}{3}$ grown. However they had decomposed sufficiently so that from the feathering present I couldn't get a

R.M. Zink

1980

Journal

Hotel El Tiro, 230m, 19.5 km by road NNE Encarnación, Dpto. Itapúa, Paraguay.

11 March
(cont.)

positive identification.

<u>Stelaronxys leandri</u>	1 ♂	forest
<u>Trogon rufus</u>	2	" , see above
<u>T. sumichrasti</u>	2+	" " "
Motmot	1?	forest - quick look.
<u>Colaptes cafer</u>	2+	seen in pasture.
<u>Furnarius rufus</u>	3	heard in scrubby pasture.
<u>Thamnophis caeruleus</u>	2-3	heard in forest
<u>Chiroxiphia caudata</u>	2-3	" " "
Kiskadee	2-3	
Boat-billed Fly	2	
<u>Myiodynastes maculatus</u>	1	forest
<u>Empidonax varius</u>	2	" edge.
Swallow sp.	1	overhead (quick look)
House Wren	2-3	edge.
<u>Turdus leucomelas</u>	2-3	forest. I think I heard this species sing - very loud & variable - same song I heard & described on 5 March.
<u>Coryphospingus cucullatus</u>	5-6	Tung/forest edge.
<u>Trichothraupis melanocephala</u>	2	" " "
<u>Basileuterus culicivorus</u>	4+	forest
<u>B. leucobrychis</u>	4+	"
<u>Cacicus haemorrhous</u>	4	" edge - see above
<u>Icterus cayanensis</u>	2	Tung edge

R.M. Zink
1980

Journal

Hotel El Tirol, 330m, 19.5 km. by road NNE Encarnación, Depto. Itapúa, Paraguay.

11 March Cyanocorax chrysops 6⁺ Becker's forest.
(cont.)

12 March Spent day at hotel due to rain + ping-pong tournament w/ NKT. For scores see sports section of his notes.

13 March Went to Becker's forest, Tury, pasture plus the pasture of spring (i.e. the confouse pasture). There was a fair bit of activity, which I had expected after all the rain we've had. I got a Jarua Warbler at clearing as it foraged in tree along edge. The 2 Plain Antvireos were taken in the open, con-disturbed, forest at Beckers, where I also got a Empidonax euleri (NKT prep.). The Furnarius rufus was from a tree in the pasture of spring. It rained from 1000 - 1100. Cold most of day. For bird list see 15 March.

14 March Went to Salvador's fields. Pt. Clear day, sl. breeze, becoming hot by late a.m. A lot of bird activity, especially along the dense ^{+ sm. tree, Bally-like} gross-scrub/pasture edge. I saw 15-20 [young] Sicaria flavedula + Zonotrichia capensis + Coryphospiza cucullata. I got 2 Coryphospiza in the shrubby growth which occurs in clumps in Salvador's pasture (same for Zonotrichia +

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

14 March
(cont.)

Icterus cayanensis. I squeaked a ♂ Falco sparverius, which had perched on dead standing snag, overhead + coll. it. On way back along the edge described above, I coll. an Elania from a dead 6 ft. bush + a Mimus saturnius from a 20 ft. tree. There was a lot of activity along this edge, incl. Trop. Kingbirds, Rufous Horned, Kiskadee, Elania sp. (collected), Talp. Ground-Doves, 15 Sialia, 10 Coryphospingus, Mockingbird. For bird list see 15 March.

15 March

Went to cornfield via existing + cross-country trails. 0815 pt. cloudy, st. breeze, cool. At gravel pit I coll. a Dacnis from the saplings + missed a prob. ♀. I also coll. a Coryphospingus curvillatus there but later lost it from my bag. At the lower part of trail, where it flattens out into fairly open forest, I coll. a Trogon rufus - probably the mate of the bird (RMT 1386) I took at same spot on 11 March. There was a large burst of activity at two-log bridge, incl. Trichoteryx, Pyrrhoxena, Veniliornis, Picumnus, Philydor sp., Syrnallia, Phylloscopus, Chiroxiphia, +? There was little happening at cornfield. ~30 Gray-r. Swifts

R. M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

15 March
(cont.)

overhead, 4 Coryphospingus, 2 House Wren. A ♂ house Wren seemed to be in full song so I shot it but unfortunately it escaped through grass. On way back through forest, I watched a Basileuterus leucopleurus chase a [♀] Chlorospiza. As I watched, I was aware of a bird on ground, which called (single couple of whistled notes). As I moved closer it flew. I was able to get it to call in (apparent) response to my squeaking, & I then saw it on ground scratching in leaf litter (R 147 1401). The forest was fairly devoid of undergrowth here but not totally - little mist - canopy vegetation.

Bird list 13, 14-15 March

Tateya Tinamon	2-3	calling in forest
Bl. Vulture	4+	
Turkey "	1 or 2	
Roadside Hawk	2	8000 ft, Becker's forest
Sparrow Hawk	3	snags at Salvador field
long-tailed Parrot	3	over gravel pit on 15 th
Picui Ground Dove	8	
Telfaroti	8	
<u>Leptotila verreauxi</u>	4	forest, com at Salvador
Pearson Pigeon	1	active nest in Becker's Tany
Ani	15-20	edges

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km by road NNE Encarnación, Dpto. Itapúa, Paraguay.

15 March
(cont.)

Guiraca guiraca 15-20 edge corn

Squirrel Cuckoo 2-3 forest

reddish caprimulgid 1 Tirol upper part night / 13th
mid. caprimulgid 1 flycatcher forest near hotel -

seemed to have a bit of white near
wing tips. Did not appear to be a
Pamague or night hawk

Gray-rumped Swift 30⁺ overhead at cornfield

Phaethon eurhynchos 1-2 Tirol - forest + near bldg.

Trogon rufus 1 ♀ coll.

T. surrucara 2 heard in forest

Picumnus temminckii 1⁺ forest near 2-log bridge
apparently fresh plumage

Melanerpes candidus 10 2-2 Salvador on 14th

5-10 overhead airstrip on 15th - this
group was v. high, some calling &
some sort of soaring. Seemed to
be a group affair.

Ventilornis spilogaster 1-2 forest

Colaptes campestri 2 heard

Lepidodactylus fuscus? 1 forest on 15th

Rufous Hummer 3⁺ scrub, edge

Synallaxis cinerascens 2-3 forest

Philydo sp.

2⁺

Sclerurus scaroni 1 coll. on 15th

Thamnophila caerulea 5 forest

Plain Antbird 2 Babes forest (collected both)

R.M.Z. nlc
1980

Journal

Hotel El Fird, 230m, 19.5 km by road NNE Encarnación, Depto. Itapúa, Paraguay.

15 March
(cont.)

Tanagra seledon 1 Berkes forest (dense) or
13th. Quail look, but had
yellow nape + was greenish

Euphonia sp. 3+ heard

Dacn. cayana 3+ gravel pit, reservoir ^(sapling + low shrubs)

Parula Warbler 3+ forest edge, dense second
growth.

Basileuterus culicivorus 4+ forest. Singing ♂

B. leucoblythum 8 " " "

Vireo olivaceus 2 " "

?? Cacicus haemorrhous? 10 flock or 15th at airstrip
trail. I didn't think bill was
yellow - perhaps ^{Giant} cowbirds?
I'm sure d. morphism All black.

Chrys Blackbird 2+ Salvador's field + Turq
T. cayanensis 4 dense scrub + sn. tree.

[also 3+ Lagwings on 14th]

(in a.m.)

16 March

Went to reservoir, along channel, to clearing + gravel
pit + lower net (forest). I noticed again that the
forest behind hotel has few birds - usually
Basileuterus + a few occasional passing birds.
Today I call. 2 Turdus leucomelas (chuck) from
~20 ft. up in the forest near clearing. They seemed
to be part of a group of 3; they called back +

R. M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

16 March
(cont.)

forth. Returned down airstrip trail to gravel pit & lower net. I went to the catone forest (especially undergrowth) near dining room & coll. a Megascops pitangus from 25 ft. in a tree. For bird list see 19 March.

17 March

Went to Becker's forest, pasture & Tung orchard. I ran into a pocket of activity in the disturbed forest below Becker's pasture (especially along the fence which divides the forest into $w/4$ & $u/4$ underbrush). I shot a small bird from 25 ft. in the canopy of a tree but couldn't find it. I then collected 5 birds (1408-1412). During that time I kept thinking about the first bird that I couldn't find. It was active, yellowish below, long tail, somewhat cocked. I had initially thought it was a Phylloscopus sp. but as I thought about it, it seemed much too active. On my way home I returned to the spot I'd searched earlier & expanded my search area & found the bird, a Poliptila lactea. I think there was 1 other " " around, as I heard a grackler-like call. The Pachyrhamphus was ^{foraging} about 20 ft. in the canopy. For bird list see 19 March.

18 March

Returned to Becker's pasture forest. I coll. a Zonotrichia cassini in a tree in

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1980


Journal

Hotel El Tirol, 230 m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

18 March
(cont)

a bean patch. The House Wren was singing from a Tung tree along pasture border, at about 12 ft. The Myiophobus (1416) was in the forest below Becker's pasture, about 20 ft. in a tree + foraging. The am was in a group of 10 at clearing edge. I found a dead calf in Becker's pasture w/ a group of 55+ Black Vultures - no Turkey or Caracaras! For bird list see 19 March.

19 March

Went to Tirol forest via airstrip + cross-country + middle Trails. I coll. the Cydopis along Airstrip trail, in a somewhat open part of forest w/ dense vine bamboo on each side of trail. ~~Below~~ Near two-log Bridge, in the flat part of forest, there was a group of several birds incl. Philydor (AMZ 1423), Synallexis, Chiroptera, etc. I got a Piaya cayana just above 2-log bridge. I coll. an Empidonax euleri in the eagles where the forest ^{trail} enters cornfield (MJS catalogued + prep.). On Long Trail I coll. a Mackenziaena severa from a growth of dense ^{Vine} bamboo. It called, a whistle almost hawk-like, "wheer" (~), high pitched + came in to my imitation. Near Euleri Gulch, on Middle Trail, I found a fruiting tree (fruits grape-like + lt. green, ^{size =} ) which had a # of birds

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto Itapúa, Paraguay.

19 March including Turdus (rufiventris + ananachalins?),
(Cont.) Chiroxiphia (♀^{+♂} plur. bird eating fruits), Tangara
seledon, + ? At nets, net NKT + I batted
a possible collection of a guan, which was
eating fruit in the trees we've checked since
31 January.

Bird list for 16-19 March

Tatanga Tinamou 3⁺ - heard at least 3 in forest
behind hotel. They seem to
prefer this forest, w/ some under-
growth but not a lot, as I've never
heard them in forest below hotel, which
is denser.

<u>Black Vulture</u>	55 ⁺	Becker's pasture
<u>Turkey</u> "	flew	"
<u>Roadside Hawk</u>	1	Becker's.
<u>Falco sparverius</u>	2 ⁺	" , confirmed below Tirol
<u>Picus Ground Dove</u>	5	
<u>Talpacoti</u> " "	10	
<u>Leptotila verreauxi</u>	4	Tung forest
<u>Pip. azur</u> Pigeon	5	Forest, overhead, Tung
<u>Penelope superciliosa</u>	1	fruit tree behind hotel
<u>Ani</u>	15	
<u>Guira Cuckoo</u>	15	
<u>Piaya cayana</u>	3	forest

R. M. Zink
1980

Journal

Hotel El Tirol, 230m., 19.5km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

- 19 March (cont.)
- | | | |
|----------------------------------------|-----|------------------------------------------------------------------------------------------|
| <i>Caprimulgid</i> sp. | 2 | Tirol on 18 th - poss Pennaques |
| Gray-r. Swift | 15 | cornfield on 19 th |
| <i>Phaethon</i> <i>emys</i> | 1 | Tirol flower |
| <i>Stephanoxis lalandi</i> | 1♂ | singing at ground pit |
| <i>Trogon surrucura</i> | 2 | heard in Tirol forest |
| <i>Veniliornis spilogaster</i> | 2 | Becker's forest |
| <i>Colaptes cafer</i> | 3+ | sings in scrubby pasture |
| <i>Sittasomus griseicapillus</i> | 1 | Becker's forest (coll.) |
| <i>Furnarius rufus</i> | 2+ | heard in scrubby pasture |
| <i>Synallaxis cinerascens</i> | 3 | forest (all described ^{above} as ^{some} others) |
| <i>Ph. tydo</i> sp. | 3+ | " (coll. 1 on 19 th) |
| <i>Thamnophilus caeruleus</i> | 4 | " |
| <i>Dysithamnus mentalis</i> | 1 | Becker's forest |
| <i>Chamaeza caryanisona</i> | 1 | heard on 19 th |
| <i>Tityra</i> sp. | 2+? | forest edge |
| <i>Pachyrhamphus polychropterus</i> | 1 | Becker's forest (coll.) |
| <i>Chiroxiphia caudata</i> | 3+ | Tirol forest on 19 th |
| <i>Elaenia</i> sp. | 1 | chirpy, wood-pewee call, heard ^{only} in |
| <i>Phylloscopus</i> sp. | 2 | some as PKJ coll. on 19 th |
| " | 1 | forest sp. (prob. <i>flavescens</i>)? |
| <i>Empidonax euleri</i> | 1 | coll. on 19 th (W.K. Johnson catagory) |
| <i>Eiskadee</i> | 4 | |
| Boat-billed Fly | 4 | |
| House Wren | 3 | several singing at (see coll.) |
| <i>Turdus rufiventris</i> | 2 | forest |
| <i>T. leucomelas</i> | 3-4 | " |
| <i>T. amaurochalinus</i> | 3 | |

R.M. Zink
1980

Journal

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

- 19 March
(cont.)
- T. albicollis 2-4 forest.
 - Zonotrichia capensis 6+ Tiro edge
 - Coryphospingus cucullatus 4+ "
 - Hemithraupis guirra 1 sapling at gravel pit.
 - Trichothraupis melanocephala 4 forest
 - Sayaca Tanager 2 spreading tree at clearing on 18th
 - Tangara selasphora 1 fruiting tree in forest on 19th
 - Dacnis cayana 3 spreading tree at clearing, high.
 - Parula Warbler 2 Becker's forest, 30ft.
 - Basileuterus culicivorus 5+ forest
 - B. leucobdophorus 5+ "
 - Vireo olivaceus ? 2 forest on 19th
 - Chas. Blackbirds 15 flock evening of 18th
overclearing (during net check)
 - Icterus cayanensis 1 fruiting tree in forest on
19th - high in canopy! (last pos.)
 - Cyanocorax chrysops 10-15 Becker + Tiro forest

[Lapwing 2
Polyptila lactea 2 Becker forest

20 March Went to Salvador's field in a.m. It was mostly clear + got quite hot by 1000. Coll. a Melanerpes candidus + Colaptes cafer from flocks in the corn field. The two groups were moving among the large standing snags - there was

R.M. Zink
1980

Journal

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

20 March (cont.) a lot of calling w/in groups. I coll. a Zonotrichia capensis from a tree along fence row on way back. Not a lot moving in Salvador's pasture. I think the hot day depressed activity. Had a shot at a Tatanga tinaman but I had a 4/0 shell in gun + bird was 10ft. away! (near reservoir drainage)

21 March Went to gravel pit, reservoir + to Becker's forest in a.m. Again quite warm. I coll. a Thammodon caeruleus in forest near gravel pit (I thought it was something else). I coll. the Vireo olivaceus at the gravel pit in the saplings. I shot at 2 birds walking on ground in the saplings - they could have been tinamous, wood-rails (but a way from water) or wood-quail or? I had a quick look + fired immediately. I doubt they were quails, but I couldn't make a guess as to their (there were 2) identity. Got a stomach sickness. No bird list for 20-21 March.

22 March Took down nets in a.m. w/ PKJ. Spent rest of day in bed w/ gut ache + diarrhea

23 March Spent day at Tirol packing.

24 March Departed Tirol to Encarnación + then to Asunción. Changed plane reservations to 25 March.

R.M. Zink
1980

Journal

Asuncion, Paraguay to MVZ

25 March Departed Asuncion in afternoon for Rio + got
connecting flight to Miami.

26 March. Miami to LA to S. Francisco + then to MVZ.

Zink, R. M.

1981

Journal

Calif

Miner.

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1981

Journal

Berkeley to Lake Pillsbury area, Lake Co., California

10 March

David Gook + I left MVZ at 0600 for a site near Pillsbury Lk., where ~~we~~ (plus S. Kiese) collected birds in Dec. 80. We went Mon Hwy. 101, past Ukiah + E on 20 to Lk. Pillsbury. We then drove to the site $4\frac{1}{2}$ mi. S, 1 mi. E Hull Mtn., arriving ~1130. We both hunted for ~2 hr. in order to assess bird numbers. I mainly wanted to net Fox Sp. so they could be returned alive to MVZ and Kang typed. We saw only a few but set 5 nets anyway.

This area consists of an old burn w/ varying degrees of post fire succession. Some dense brush (*Arctostaphylos* spp.), then (Sugar-Ponderosa Pine (red-see), oaks, Madrone, Buckeye). The topography is rolling w/ some steep places. Open ground varies from 0 to 40% ($\bar{x} \approx 15\%$).

In afternoon we drove almost to Hull Mtn. There was snow in places. We coll. 2 *Cyanocitta stelleri*, saw *Tamias hyemalis* + *Geothlypis trichas*. We found no better brushy areas for *Passerella*, so we returned to nets. See 12 Mar. for bird list.

11 March

Up 0630 + hunted until late a.m. Neither Dave or I saw very much of interest. It was quite cold in early a.m. We worked on birds until 1:00. We then drove back towards Lk. Pillsbury in hopes of

R.M. Zink
1981

Journal

Hull Mtn. area, Lake Co., California

11 March

finding either Zonotrichia spp. or Passerella habitats. We hunted near Squam Co. for about 1 hr. (see catalogue) - mostly dense ^{1000 ground cover} chaparral (1-2 m) w/ some open ground + groups of pines. Some deciduous growth along stream. We returned to nets in late afternoon.

12 March

We returned to site near Squam Creek + hunted brush from 0800-0900. We then moved to the N side of Pillsbury Lake. Much of the immediate area surrounding lake is open + grass - suggesting lake level fluctuates. On N side, there are oaks + chaparral. There were 200+ finches (Cassin?), 100 Starling, 50 Brewer Blackbird. We returned to nets + took them down. We then returned to Fatten Valley + Ukiah, + MUZ.

Bird List 10-12 March (sites in RMZ catalogue)

Turkey Vulture	10	over hills
Cooper Hawk	2-3	mod. - dense forest
Red-tailed Hawk	1	tall trees along stream
Sparrow Hawk	3	open areas
Marsh Hawk	1	" "
Calif. Quail	10	brush - calling, one "Chicago"
Killdeer	1-2	Lk. Pillsbury
Gull sp.	1	" "
Band-tailed Pigeon	20	flock in conifers at 800m ^{site}
Anna Hummingbird	10	brushy ♂♂ singing

R.M. Zink
1981

Journal

Hull Mtn. area, Lake Co. Calif.

12 March.

(cont.)

Common Flicker	5-10	open forest
Pileated Woodpecker	1	forest (near Hull Mtn. ^{on 10th March.})
Acorn "	4	"
Hairy "	1	" - young pines
Black Phoebe	4	stream
Viol.-gr. or Tree Swallow	15	near Lk. Pillsbury
Stellar Jay	10	brush (higher)
Scrub "	10	" (lower)
Common Crow	20	near Lk. Pillsbury
" Raven	5+	higher site
Clark Nutcracker?	3	near Hull Mtn.
Mountain Chickadee	20	" " " on 10 March
Chestnut-backed "	5	upper site
Plain Titmouse	1	near Lk. Pillsbury
Common Bush-tit	20	brush
White-br. Nuthatch	6+	forest
Brown Creeper	2	pines near upper site
Wren-tit	20	brush
Benick Wren	1	"
Calif. Thrasher	10	"
Robin	10	forest
Varied Thrush	5	forest near Lk. Pillsbury
West. Bluebird	3	" " "
Ruby-cr. Kinglet	20	forest
Starling	50	near Lk. Pillsbury
Hutton Vireo	8	brush/cats near upper site
Red-w. Blackbird	10	near Lk. Pills.

R.M. Zink
1981

Journal

Hill Mtn. area Lake Co., Calif.

12 March
(cont.)

Brewer Blackbird	25	near Lk. Pillsbury
Finch	100's	" " " + above
Lesser Goldfinch	25	brush at upper site
Rufous-s. Towhee	15	" " " "
Brown "	2	near Lk. Pillsbury - brush
Junco hyemalis	20	" " " + above "
Golden-cr. Sparrow	2	" " " - brush.
Fox Sp.	10-15	brush.



R.M. Zink

1981

Journal

Berkeley, Calif. to Potem Cr., Shasta Co., Calif.

13 May

Ned K. Johnson, Jill A. Marten + I departed the MVZ at 2:30 p.m. We drove E on 24, N on 680 to 505 to Hwy 5 to Redding. Along way saw a few ^{Green Heron near Redding} Buteo jamaicensis, 2-3 White-t. kites, Bl. necked Stilts (in flooded fields). At Redding we went E on Hwy 299 to the road to Pit R. (it goes N from 299 at about Round Mtn.). We camped at Potem Cr. Rained during night.

14 May

Potem Cr., 1832 ft., 4 mi. E + 1 mi. S Squaw Cr. Fire Control station, Shasta Co., Calif.

We spent day hunting along Potem Cr. (where road crosses creek). We were mainly after Empidonax difficilis (along creek) + Vireo solitarius (often just off creek). The stream vegetation is often dense + complex. There are several spp. of deciduous trees (Salix, alder, Bl. oaks, + ...) plus lots of undergrowth (incl. ^{Blackberry} young oak, red bud, + ...). The creek was flowing pretty fast + there are some deep (3 ft.) pools. There are open fields (w/ lots Equisetum) + pine fir-oak open woodlands away from stream. Cloudy all day + got v. dark in afternoon. For bird list see 15 May.

15 May

Spent a.m. hunting for E. difficilis along Potem Cr. - coll. 3.

Bird List 14-15 May

Calif. Quail 4+ along creek, ♂♂ calling
Mourning Dove 6+ " " " "

R.M. Zink
1981

Journal

Potom Cr., 1332 ft., 4 mi. E + 1 mi. S Squaw Cr. Fire Control
Station, Shasta Co., Calif.

15 May
(cont.)

Great-h. Owl 2 - pair called in even. of 14th
Swift (prob. Vaux's - WKT + JAN)

unid. Hummer 10 - 1 lg + a small species

Downy Woodpkr. 2 - nest in dead tree along Potom Cr.

Ash-cr. Flycatcher 2 dead trees away from creek

Western " 10 along stream. ♂♂ calling. Hard to
approach ^{often} + v. near stream

West. Wood Pewee 2 to all trees near stream

Olive-s. Flycatcher 2 " " "

Tree Swallow 6 overhead + dead trees

Stellar Jay 3 along stream + tall trees

Common Bushtit 10 " " "

House Wren 10 " " "

Bewick's " 3 " " "

Robin 10 " " "

Solitary Vireo 15+ " " + in oak-conifer stands

Warbling " 2-4 " " "

Orange-cr. Warbler 8 " " ♂♂ singing

Nashville " 6 " " "

Yellow " 10 " " "

Yellow-r. " 4 " " "

Bl.-thr. Gray " 8 " " + ^{mostly} above in oak-conifer

Wilson Warbler 2 " " "

Brn.-h. Cowbird 4 dead trees

Western Tanager 1 " "

Bl.-h. Grosbeak 10 along creek

R. M. Zink
1981

Journal

Poten Cr., 1332 ft., 4 mi. E + 1 mi. S Squaw Cr. Fire Control Station, Shasta Co., Calif.

15 May
(cont.)

Lazuli Bunting	4	dense veg. away from creek
Purple Finch	6	" " " " "
unid. Goldfinch	8-10	
Ruf.-s. Towhee	15	along stream
Junco	4	calling
Chipping Sparrow	4	along road
Golden-cr. Sparrow	1 ad.	" " in brush
Song "	10	along creek.

In afternoon we moved to Squaw Cr. area (see catalogue for locality). The drive was of interest because we went some west extensive forest of a definite coastal aspect (Big Leaf maple, lge. Douglas Fir). Lots of ravines; rugged terrain. We stopped at Squaw Cr. Fire Control station but it was apparently closed. We camped along rd. & coll. 1 *E. d. difficilis*. The habitat was rather complex - decid. + conifer. trees from sparse to dense, lots underbrush + exposed rocks. I guess it is typical coastal-type wet forest.

16 May We hunted area all day. Both vireos & western Flycatchers were common.

17 May In a.m. hunted area again. We then



R. M. Zink
1981

Journal

17 May
(cont)

Squaw Cr. area Shasta Co. California
started back, stopping 1x to collect + record
(WKT). We made a complete circuit back
to Hwy 5. The road is paved from Hwy 5
(~25 mi. W Redding) to pond drainage of
Shasta Lake (~28 mi.) + dirt (a windy) rest
of way (to 299, where we came in). There is
miles of the "coastal forest" type of
habitat. Lots of dense stands of trees suitable
for Spotted Owls (WKT). An impressive
area of forest.

We saw many of same birds along
Squaw Cr. as Patch Cr. Significant
changes: 1 Turkey Vult., pr. Common
Merganser, Hairy Woodpecker, heard Piloted
+ Sphyrapicus (WKT), more Junco, small
Swifts (? Vaux), Brn. Creeper (singing ♂).
There were fewer Y-br. Chat + House
Wrens.

We reached Hwy 5 at ~1:30 p.m.

R.M. Zink
1981

Journal

Berkeley to Minneapolis, Minnesota; to Lake Itasca area, Clearwater Co., Minn.

25 May

Left Berkeley (via airplane) for Minnesota.

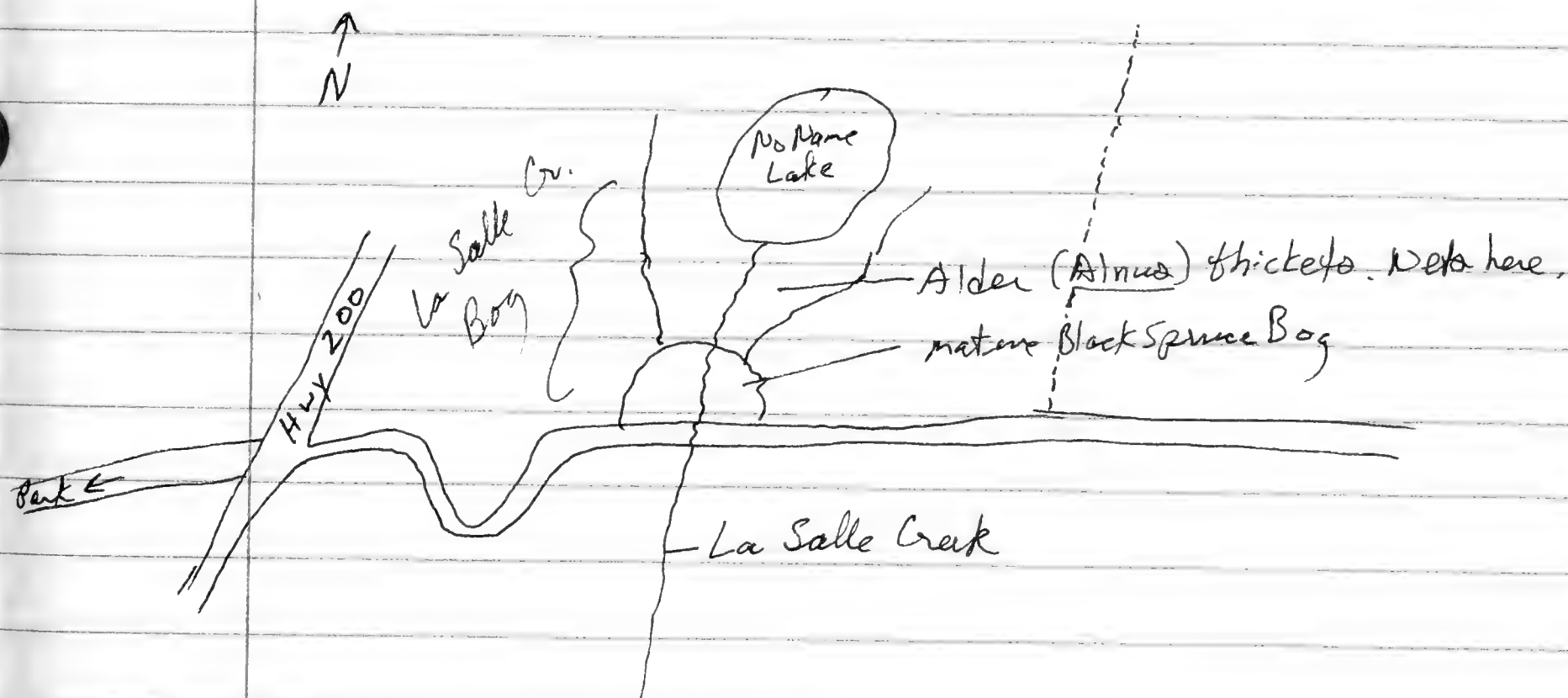
26 May - 28 May

Spent getting supplies + plans for collecting trip to northern Minn.

Larry Conroy + I left Mpls. about 3:00 p.m. on 28th for the Univ. Minn. Field Biol. Station at ^{Lake} Itasca, Clearwater Co., Minnesota. We drove N on Hwy. 10 to Mottley, Hwy. 64 to jxn. 200/71 + W to Itasca St. Park; we arrived 9:30 p.m.

29 May

I set 4 nets in La Salle Creek Bog. This area is site



of past projects by Mario Roma (Aner. Midl. Nat. 1977(?) + Bruce Fall (unpubl.)⁻¹⁹⁷⁷). Bruce F. found 22 eggs of Parula's breeding in this bog. Bruce arrived today w/ his class from U of Minn., Mpls., for a weekend of bird study. Bruce thought that the bog aspect had changed due to growth of the Alnus - specifically it doesn't seem as good for Ergidorax alnorum as it did in 1977.

In the afternoon, I walked the road denuded by

R. M. Zink
1981

Journal

Lake Itasca area Hubbard Co. Minnesota

29 May (cont.)

the dotted line E of La Salle Cr. Along this road is ^{some wet low spots, small temporary ponds + open thickets} a fairly mature deciduous forest (mostly Populus) w/ some conifers. There are a few temporary ponds + some open fields. ~~Here~~ Along this road I collected Empidonax minimus + Vireo olivaceus, which were common. I'm not positive these are completely settled on territories, as ♂♂ were very close. There are also Contopus virens + Syrphidicus varius along this stretch.

30 May

Checked nets in a.m. + walked same road, collecting E. minimus + V. olivaceus. In afternoon, Larry + I drove to Lake Alice Bog + I hunted in hrs. 4-5; it was very still. In fact, both Bruce E. + I have remarked that it is unusually quiet - there is not the usual density of birds. It seems like there should be another wave of migrants.

31 May

Closed nets in a.m., as I've only netted 2 Empidonax alpinus in 2½ days - also it's too much trouble to "slog" out to nets 4+ times/day.

1-6 June

(written 6 June). This will be a summary of last 6 days.

Weather - it has been rainy + cold much of time w/ only few sunny days. Nighttime temps cold.

It still seems to be a strange spring - early summer. Specifically, some deciduous trees (like Salix + Alnus) (or shrubs)

R.M. Zink

1981

Journal

Lake Itasca area Hubbard Co. Minnesota

1-5 June
(cont.)

are still leafing out. There seem to be lower densities of birds than I'd expect. For example, the 4 nets at La Salle Cr. Bog have not been too productive. The breeding condition of some netted birds (as noted by degree of cloacal protuberance or brood patch development) seems to indicate these spp. are in early stages of breeding (this seems a bit late to me - but perhaps it's not). A couple ♀♀ E. alpinum had ovaries $\sim 8 \times 5$ (ova $\leq 2 \frac{1}{2}$ mm) + did not appear post-breeding condition, i.e. no collapsed follicles evident. Thus, they seem a couple weeks away from laying. Dr. Parmelee's ornithology class + myself have found the following nests in past couple days: Cowbird (4 $\frac{1}{2}$ fledged young), Hermit Thrush (4 - 2 day old young), recently ^{hatched} ~~fledged~~ Ruffed Grouse (no more than couple days), Solitary Vireo (eggs - nest destroyed + on 4 June found rebuilding), Phoebe + Barn Swallow on nests at Biol. Station, 9 Ovenbird (5 eggs on 5 June).

I have spent time collecting Empidonax alpinus (see spp. account). I have not encountered Vireo solitarius other than pair Dr. Parmelee class is studying - they seem to be ^{very} local. Apparently they prefer Red Pines (mature), w/ an understory of Balsam Fir, young pines, spruce or tamarack (?) or aspen. Dr. Parmelee told me they often put the nest in a young Balsam Fir.

Empidonax minimus & Vireo olivaceus are very

R. M. Zink
1981

Journal

Lake Itasca area, Hubbard Co., Minnesota (see Rm2 catalogue)

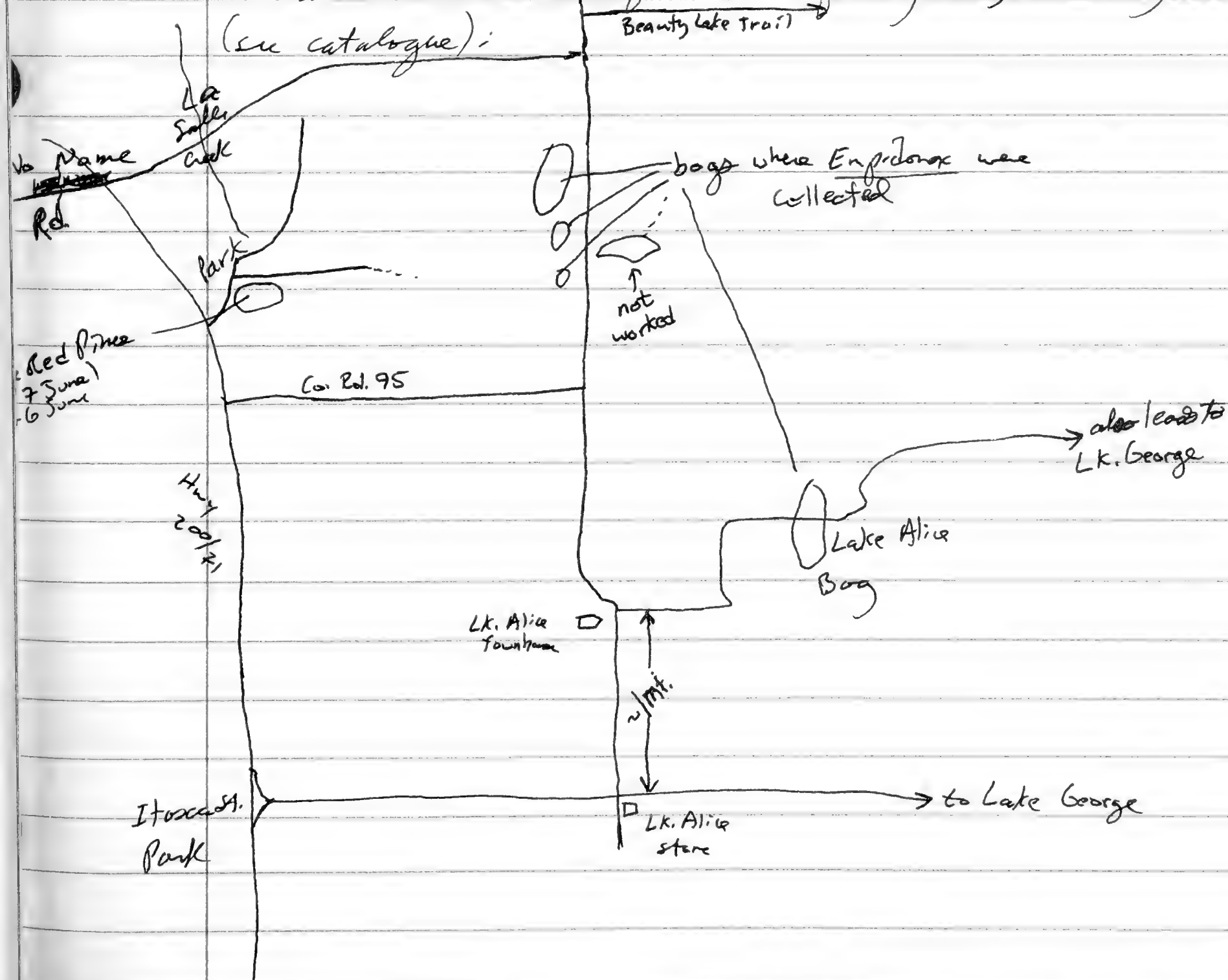
1-6 June
(cont.)

Common - the flycatcher in fairly open mature (or somewhat) aspen ($w/ \leq 20\%$ conifer $\frac{3}{4}$ + understory) stands. The vireo is common here as well as about any forest conditions other than strictly conifers. Sphyrapicus varius has not been as common as I expected, but still around in good numbers in mature aspen groves. Contopus virens seems syntopic with Empidonax minimus.
Gave Bunker a talk on taxonomic system.

I have only run the nets sporadically, as they're not producing much of value to me (like Empidonax or virens).

I have worked a few areas fairly well, including

(see catalogue):



R. M. Zink
1981

Journal

Lake Itasca area, Hubbard Co., Minnesota (see RMZ catalogue)

1-6 June
(cont.)

On 6 June, I went w/ some of Pr. Parulae class to see a Goshawk nest. A classmember climbed tree next to nest + described what she saw: nest ^{or 2 1/2 x 1 1/2 ft.} 3ft x 1ft, lined w/ pine needles, no apparent prey in nest, feces ejected (ground in all directions whitened), 4 young (all ~ size, but varying degrees of feathering - most advanced ~ 1/2 way to fledging), iridescentish, (I forgot bill, leg + foot color). During the time she was in adjacent tree (40ft. up, 15ft. away from nest), adult ♀ called from nearby. However, when one of the young started giving a distress call, the ♀ began a series of 3 attacks. She'd fly in, giving a "keek-keek-keek..." When she approached the person in tree she folded her ~~the~~ wings (stopped) and hit her. Apparently, the attacks were a combination of impact + talons - there were no noticeable scratches on climbers helmet or clothes, but, D.E. Parmler has hat shirt ripped open. I ~~was~~ noticed that the ♀ did not seem bothered by the ~~few~~ small branches, around the climber. When she came in to attack, she knocked these small branches down on her approach, several feathers torn out in the process.

6 June (cont.)

~~June~~

Visited with Duane Warner at Lake George. Saw a Pileated Woodpecker 3mi. w of town. I hunted an area of mature Red Pine (see map above) in afternoon hoping to find Solitary Vireos. However, I saw 0.

7 June

I returned to Red Pine site around 0700, it was

R. M. Zink
1981

Journal

Lake Itasca area, Hubbard Co., Minn. (see catalogue)

7 June (cont.) raining + cold. I hunted for 2 hr. I do not think there is sufficient understory for Sol. Vireos here (i.e. no or very few young conifers or aspens). There's lots of brush though.

8 June Took nets down at La Salle Cr. Bog (they've been closed for days) + prepared to depart for prairie to West to look for Empidonax traillii.

I am not including a bird list because the birds of the park are well known + documented by Parmelee's article on Birds of Itasca St. Park (in Loon in late 1970's). What I give below is a partial list:

Amer. Bittern	swamp	Lk. Itasca, Beauty Lake Trail
Turkey Vulture	2	over station on 7 June
Sharp-shinned Hawk	4	around "
Goshawk	1	see spp. acct.
Mourning Dove	20	along Hwy 200
Wh.-g. B.-v. l.	1	calling near La Salle Cr. Bog 1-2 June
Nighthawk	5	" " " " " "
Chimney Swift	3	6 June along shore at "Brewer Inn"
Orange-cr. Warbler	1	probable singing male in mature deciduous stand on 2 June

Drove W on Hwy 200 to Mahanoman, S on Hwy 59 to Waubesa, W on 113, S on 32 to Ulen, where I went W on Co. Rd. 34. About 3 mi. W of Ulen, on W side of road, there is a waterfowl management area with a lot of low brushy vegetation (like Salix

R.M. Zink
1981

Journal

Western Minnesota, Clay & ~~St. Louis~~ Co.

8 June
(cont.)

+ aspen + Alnus (?). I walked around and heard Empidonax minimus + saw a couple E. albonum / traillii. I decided to go further west, so I continued on to Hwy. 9 (Fulton) + went south for about 3 miles. I then turned east + followed several gravel roads. I collected 2 E. minimus in aspen / willow groves; they seem common whenever there are larger aspen / cottonwoods. While I was walking towards an old homestead, w/ a wet (now dry) area of Salix bordering, I heard a ^{Willow} Traill's Flycatcher (E. traillii). This clears up the problem I had at Strasca, as this individual gave a clear "fitz-brev", w/ accent on first syllable; unfortunately I missed. There were also Least Flycatchers in the same woodlot. I continued on + saw a ^{circular} patch of Salix in an essentially open grassy area (about 50m in diameter - the willows that is). The willow clump was extremely dense, formerly quite wet - dry now + about 8 ft. in height. I heard one ♂ Willow Fly., and collected the female. I camped at an adjacent abandoned farmhouse.

9 June

At 0600 there was a dense fog that limited visibility to 200m. By 0715 it had lifted + I continued to a site 2 mi. W, 1 mi. S of Ulen. Here was a marsh / bog, w/ dense clumps of Salix / Alnus, some deciduous trees + in places a dense bent

R. M. Zink

1981

Journal

Western Minnesota, Clay + Wilkin Co's.

9 June
(cont.)

undoubtedly floating substrate. From the road, I could hear both Alder + Willow, + Least Flycatcher plus Veery, Marsh Wrens (Sedge), Swamp Song Sparrows. I hunted this area in a.m. The vegetation is dense, and made going difficult. Also, I got the feeling that if you went through the floating portions, you'd have problems. The area is also bordered by dead, dry + dense cattails + bulrushes, thus "sneaking" along outside also hard. The fields further removed were quieter + easier going, but sometimes too far from birds.

This is an impt. area for Empidonax. It seems the Least are associated w/ large open w/ or taller willow/alder. However, it was not easy to see a distinction between microhabitats of Alder + Willow Flycatchers. I'd say that Alder outnumber Willow 2:1; I heard 4 Willow for sure + prob. 6+ Alder. I often had shots at these birds but seldom when I was sure of song. They seem responsive to squeaks, but often only come in for a quick look without singing.

I can't really say that each spp. was occupying a diff. part of swamp, except that all Willows were in dense thickets, with or without wet substrate (i.e. almost dry to standing ^{small} pools of water).

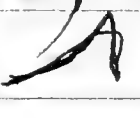
Eckert (Loon, 1980, 52:170-177) states that Alders have not been recorded breeding near Felton (+ this is ~ 7 miles E). The Alders sounded as they do at Starca. The

R.M. Zink
1981

Journal

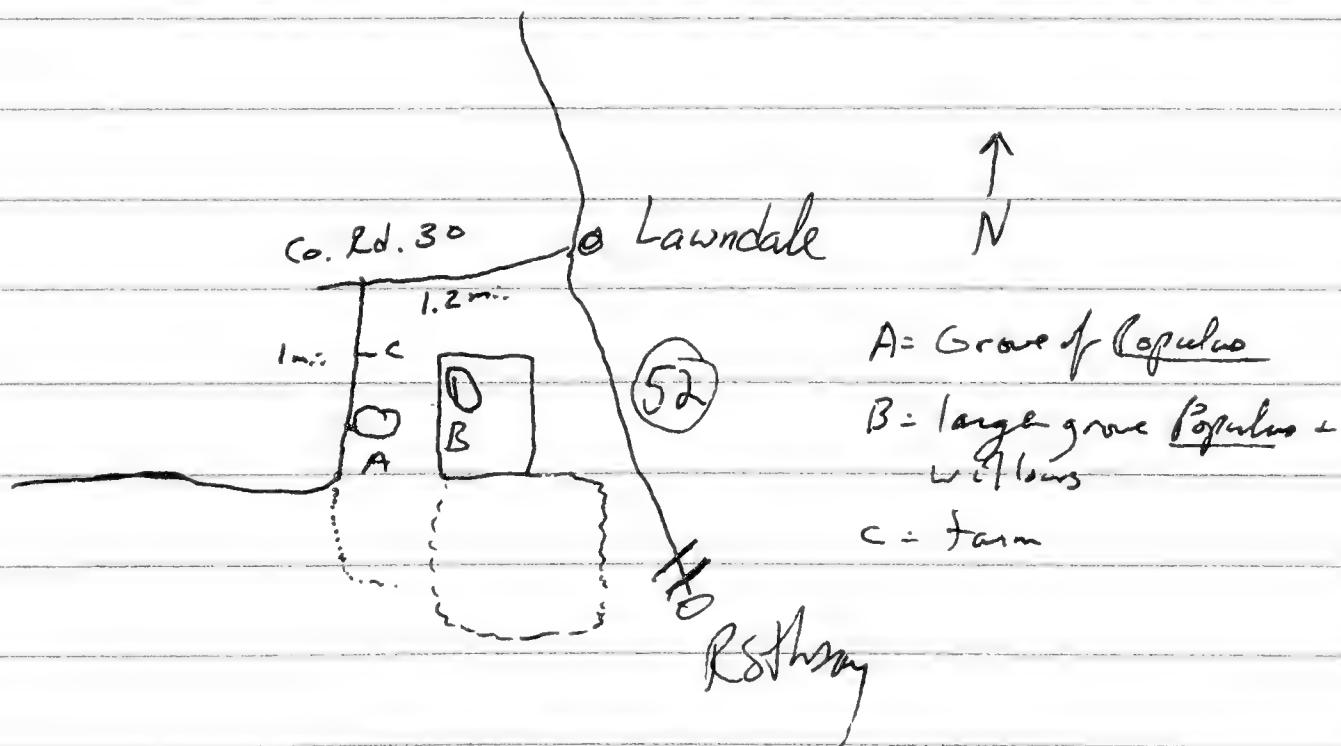
Western Minnesota, Clay Co.

9 June
(cont.)

Willows gave a definite "Fitz-bien", accented on 1st syllable. They both seem to share a call or position note of , given as a short, wheezy whistle; at least I think Willow gives it, & I know Alder does.

I decided to head S + W to find higher densities of Willow Flycatchers. Unfortunately, almost all the land is farmed. I got to Rothsay & checked on areas mentioned by Eckert (1980, above), but they ~~were~~ were all Nature Conserv. areas. Also, it rained heavily all afternoon, thus I spent a fair bit of time at cafe in Rothsay.

I called Ray Jensen, game warden in Pelican Rapids, and asked for suitable areas to collect. He told me of some likely spots at northern end of Rothsay wildlife area:



10 June

I drove to farm (C above) and was told of the grove of aspen/willows at pt. A on map. This grove

R. M. Zink
1981

Journal

Western Minnesota, Wilkin Co.

10 June
(cont.)

is about 150 x 150 m + consists of 20-25 ft. Populus, w/
some grass undergrowth. Adjacent is a 400m x 75m patch
of snags + clumps of Salix. It's rather high + dry - no wet ground under
There were prob. 4 brush.
pairs of Empidonax minimus in aspens + prob. 3
pairs of E. traillii in adjacent willows/snags/young
Populus. In evening I walked out to area B on map,
to find it is State Game Refuge - No Trespassing. This
area is a Populus forest, w/ some dense Salix
surrounding. I heard (+ saw) ²⁺²³ Veerys, East. Wren
Pewee, Warb. Vireo, Least (4+) + Willow Flycatcher.
Immediately adjacent are fields w/ Marbled Godwits
Gr. Prairie Chickens, Hung. Partridge, 3 Wilson Phalaropes
Bartramia longicauda, Erismophila alpestris, Clay-colored
Sparrows, +. Along the S edge of this forest is a beaver
house (on side of bank) + small pool. The ^{immediately} adjacent
forest consists of mostly/boggy area w/ dead Populus
snags. At camp, around dusk, I "hoated" in a pair of
Great Horned Owls; the ♂ kept me awake much of night!

11 June

Returned to "area B" + hunted "edge" of Game
Refuge, as I heard 4+ singing Empidonax traillii.
I listened very closely + heard only E. traillii +
E. minimus, because I suspected E. alpinum
might be in the boggy section. However, the
Salix is not dense here + I observed only brief
foraging sortings by both Least + W. Wren Flycatcher.
I returned to camp + spent rest of day working on
birds. Towards evening it clouded up + rained, so I

R.M. Zink
1981

Journal

Hawley, Wilkin Co. Minnesota; Clay Co., Minn.

11 June
(cont.)

Packed up tent & drove around looking for an approach to the Wildlife Mgmt. Area from east. I could see several good areas of willows, but they seemed 1+ miles from the road on western edge of area (i.e. from pt. A)

12 June

Returned to pt. A + drove + walked to an area of willows (see catalogue), w/ a small stream + some small pools. I almost expected to hear E. alburnum, but I only heard 4+ singing E. traillii; I suspect the brush wasn't dense enough for alburnum. I coll. 3 traillii. I was going to stay afternoon at pt. A, but it looked like rain, so I headed north. I did hear 1 or 2 traillii at pt. A - + I thought I collected all (2 or 3) of the ones the day before yesterday.

I went N to Barnesville, then E to Co. Rd. 31 (+ W) to checkout the " Wildlife area. I found an extensive area of forest + willows (+ other shrubby stuff). It can be reached by going E on Co. Rd. 6 off 31. I listened for ~ 15 min. + heard 3+ E. alburnum + no traillii, although they must be there. I think the ingredients for alburnum are dense alder/willow + wet (to boggy) ground. I continued W on 31 + found several good areas of willows in either Waterfowl Mgmt. or Wildlife Mgmt. I coll. 1 traillii 4 mi. S of Hawley.

R.M. Zink
1981

Journal

Clay Co. Minnesota

12 June

(Cont.)

I intended to return to a site 3 mi. W of Ulen, as I had checked it out at a poor time of day & found Least & "trails" flycatchers. I think, in retrospect, that it will be good traillii habitat. It clouded up & looked stormy so I returned to Hawley & stayed in a motel.

13 June

In a.m. I returned to site 3 mi. W of Ulen, to look for Willow Flycatchers. I remembered the area as probably being good for Willows, as it seemed drier. However, I was wrong as there were several wet areas of willows & I heard 2+ singing ♂ Empidonax alburnum, in addition to E. traillii; also there are E. minimus present in the denser, higher stands.

I went to Otawa & worked on birds. I went to Dwan's at Lake George for dinner & talked with Fran James in evening.

14 June

I drove to Lk. Alice area in a.m. to look for Sol. Vireos. Fran James & I saw little & got wet. I drove to Waskish, to hunt for E. flaviventris & V. solitarius. I met 3 students from U. Minn. Duluth, who are studying birds along the huge NSP Power lines. Their names are Farron, Maybeth & Joanne.

R. M. Zink
1981

Journal

Waskish area, Beltrami Co., Minn.

15-17
June

Summary written 17 June. To describe the weather in one word, only horseshit suffices. I have gotten up by 0430 to go out w/ Farron hunting spruce & white cedar swamps. We have driven miles of roads, checking possible spots for Sol. Vireos, but have seen none. We found a few Yell.-belled Flycatchers (*Empidonax flaviventris*), but they have been hard to approach.

The main problem has been weather. It has been cold & raining & today (17th) there is a very strong wind (gusts ≈ 50 m.p.h.) that has kept birds low & from doing much singing.

This area was studied extensively by Duane Warner (+ crew) for 2 years a couple years ago. I visited many of their old sites, plus those recommended by Dan (owner of Spruce Resort), Susan Arntson (kelliker) and people at Spruce Resort from U. Minn. Duluth.

The site 3 mi. S of Waskish, is right on Hwy. It consists of a Cedar/Spruce Swamp. It is very dense in spots, w/ some open areas (tree falls). It is a very boggy substrate (you'll get wet even in a dry year like this one), with many typical bog plants. This site should be described in the report by Warner & Doehle (prob. Minn. DNR), along with birds seen, etc.

Farron & I also visited a Black Spruce Island at 0500, about 8-10 mi. N of Waskish. We

R. M. Zink
1981

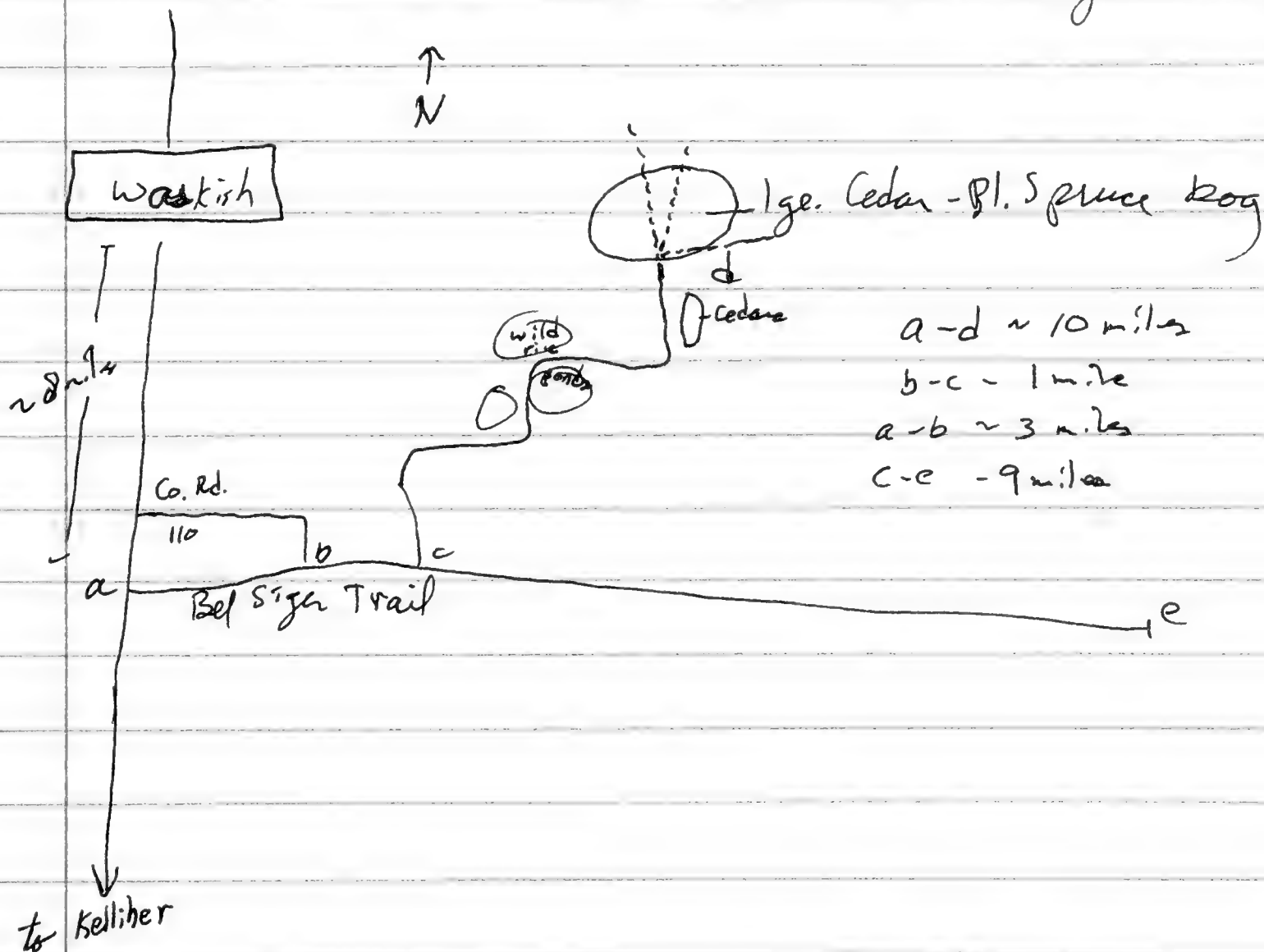
Journal

Waskish area, Beltrami Co., Minnesota

15-17 June
(cont.)

canoeed across the ditch & hunted for ~ 1 hr. We saw Palm, Connetquot & Yellow-rumped Warblers, but we did not see or hear any Yellow-bellied Flycatchers. The students from Duluth said they heard 2 ♂♂ there a couple weeks ago & don't know why we didn't find them; perhaps they were migrants.

We also went (drove) down the Bel Siger Trail:



There are lots of aspen stands, conifer stands, & open bogs. We hunted areas at "d", & took the winter road (by foot) through it - it's the middle of the dotted lines.

I decided to head east to have a better chance to find Sol. Vireos & Yell.-b. Flycatchers.

R. M. Zink
1981

Journal

St. Louis - Lake Co., Minnesota

17 June
(cont)

I camped about 10 mi. W of Fairbaults (on Co. Rd. 16).

18 June

I went to the Cedar Swamp mentioned in Green & Nien: (Bonds of the Superior Nat. Forest), on USFS Rd. 130 at jxn. of 1822 (4 mi. W of Co. Rd. 16). I coll. 3 Yell.-b. Flycatchers here + heard several others. By 0715 a storm front moved in + it began to rain, with high winds (gusts to 50 mph, steady 25 mph - Duluth weather service). Thus, the weather again spoiled the day. When the rain quit (~11:00) it was so windy that birds were not active. I called Jan Green (Duluth) + she gave me roads to drive W of Isabella where I could find Yell.-b. Fly. + Sol. Vireos. She told me that Sol. Vireos are local + hard to find. In fact, she only knew of one spot (Jxn. of USFS roads 369, 173 + 373). I visited this spot in afternoon, but it was too windy. I walked around for $\frac{1}{2}$ hr. + saw 2 ovenbirds + heard nothing else. Sapsuckers scarce.

19 June -

20 June

Collected E. flaviventris near "Sawbill Landing". It was relatively easy to find them, in suitable habitat, as opposed to the Waskish area; it is also wetter here than at Waskish.

R.M. Zink

1981

Journal

Cook Co., Minnesota (see catalogue)

21 June -

Went further east looking for Solitary Vireos.

22 June

Finally found a few in pineforest along road. I couldn't determine why they were here + not in other suitable areas. Lots of interesting "eastern deciduous" forest, + roads to drive. An easy place to collect.

Returned to Mpls.

Pope Co., Minnesota

4-6 July

Went to Pope Co. Collected in several areas for "general" species. Hunted the Tamarack bog 7 mi. E Glenwood (Leroy _____), Heard an E. alburn on 2, in areas near Log. Quite wet. [see Zink + Fall 1981 - Loon].

Zink, R. M.

1982

Journal

Calif.

C. blakeana

Montana

Costa Rica

R. M. Zink
1982

Journal

Berkeley to Santa Catalina Is., Los Angeles Co., Calif.

10 May

Ned K. Johnson, Jill A. Marten, + myself left mvz in a.m., + drove to L.A., where we spent night.

11 May

Got ferry from San Pedro to Avalon, Santa Catalina Is. On trip out saw 1 Adult Pomarine Jaeger, 10 Sooty Shearwater, 20 phalaropes (prob. Red), + several spp. of gulls. Got hotel room in Avalon.

Middle Canyon, 800ft. Santa Catalina Is., Los Angeles Co., California

12 May

We were taken to Middle Canyon by the ranger from Santa Catalina Is. company. We spent the day collecting Western Flycatchers. We mainly worked along the road, collecting in woody ravines. Orange-crowned Warblers (Vermivora celata) were abundant, + Mockingbirds were also common. For bird list, see ^{N.K.} ~~list~~ Johnson's field notes, + 13 May.

13 May

We returned to Middle Canyon (lower, or N, part). There is a creek along road, w/ fairly extensive patches of riparian vegetation, which grades into more xeric brush + sage on the adjoining hillsides. The weather was quite natty clear w/ a cool breeze. Bird list follows.

R.M. Zink

1982

Journal

Middle Canyon, 400-800ft, Santa Catalina Is., Los Angeles Co., California.

13 May

Bird list 12-13 May (incl. Avalon)

Brown Pelican 2 Lanza - Avalon

Red-tailed Hawk 1-2 over open country

Kestrel 4-5

Turkey (intro.) 1 hen

Calif. Quail 20+ in pairs

K. Alder 1? pond above Avalon (only heard, could have been a Mockingbird).

Western Gull 10 Avalon

King-billed Gull (?) 5 "

Mourning Dove 5

Burrowing Owl 1

White-thr. Swift several Avalon (NKS).

Anna Hummingbird 1-2 ♂ singing

Allen " 40 ", chasing

Common Flicker 3

Acorn Woodpecker 1-2

Lewis " ? 1

- Flew into large cottonwood at Eagles Nest Stage - middle canyon coach stop.

Western Kingbird 4+ open areas

Black Phoebe 4 along stream

Western Flycatcher 25 " " , +

Western Wood Pewee 2 (coll. 1).

Olive-sided Flycatcher 1? (NKS saw 22)

Bank Swallow 5+ along stream

Common Raven 10

Bewick's Wren 25 brush under trees, riparian

1982

Journal

Middle Canyon, 400-800ft, Santa Catalina Is., Los Angeles Co., California

13 May

Bird list 12-13 May cont.

Mockingbird	20+	v. conspicuous
Swainson's Thrush	2	2 singing ♂♂ in Middle Canyon on 13 May
Starlings	10+	
Loggerhead Shrike	4	vires along road / pasture
Hutton Vireo	1	coll. 2m2
Orange-crowned Warbler	50+	very abundant
Wilson Warbler	1	along streamside vegetation
Western Meadowlark	5	pastures near Avalon
Western Tanager	1	calling in tall cottonwoods, ¹³ May
Black-headed Grosbeak	1	dense brush along stream
Lazuli Bunting	2	" " " road
House Finch	10	
Lesser Goldfinch	15+	
Rufous-sided Towhee	10+	dense brush
Chipping Sparrow	15	

Mt. Orizaba, 2000ft., Santa Catalina Is., Los Angeles Co., California

14 May

We went to Mt. Orizaba to look for Horned Larks - I coll. 4 of 5 seen on top of Mtn., in an area of open gravel/rocks. There are probably other nearby windswept flaps with breeding Horned Larks. There were a number of

R.M. Zink
1982

Journal

Mt. Orizaba, 2000 ft., Santa Catalina Island, Los Angeles Co., California - to mainland

May (cont.)

Rock Wrens.

We returned to Avalon $\approx 1:30$ + took 4:45 ferry to San Pedro. We drove N to Oak Flat campground, ≈ 30 mi. N of Los Angeles + just W of Hwy⁵.

15 May

Oak Flat Campgrd. to ~~Charrizo~~ ^{Charrizo} San Luis Obispo Co., Calif. Plain (Wells Ranch)

We went W from Oak Flats, past Mt. Pinos, + then headed N. We took a road through the ~~Charrizo~~ ^{Charrizo} Plain - 30+ mi. of very open country with only a few ranches. There were 100s of Horned Larks in the area, + I collected 22 in about 1 1/2 hrs. along the road. We camped at Wells Ranch (deserted according to locals).

16 May

Wells Ranch, 2400 ft., San Luis Obispo Co., Calif.

We hunted Sage Sparrows in the a.m. + then departed for Berkeley at noon. Birds seen in ~~Charrizo~~ ^{Charrizo} Plain + Wells Ranch area: Turkey

Vulture, Golden Eagle, Red-tailed Hawk, Prairie Falcon^(one), Calif. Quail, probable Roadrunner (RMZ), Western Kingbird (several), Ash-thr. Fly (coll. RMZ),

Raven, Sage Sparrow, Lark Sparrow, Lawrence Goldfinch, ^{family group} Calif. Thrasher, Bush-tit, Bewick Wren, Brown Towhee, unid. hummingbird, Western Meadowlark, Loggerhead shrike, Mockingbird, No. Oriole

R.M. Zink
1982

Journal

Berkeley to Norman, Oklahoma

27 May I flew to Denver, Colo., & then to Oklahoma City, Oklahoma, where I was met by Davis Watt. Landed in thunder + lightning storm.

28 May to Wichita Mtns., Oklahoma

Davis Watt & I went to the Wichita Mtns.

31 May for 3 days. The area is one of topographic relief, rising above the surrounding Gr. Plains. It has an arid aspect, with prairie dog towns (Cynomys) + several spp. of cactus. We basically hiked around + watched birds. Among the birds seen:

¹⁰⁺ Turkey Vulture, ⁵⁺ Red-tailed Hawk, ¹⁻³ Red-shouldered Hawk, ⁵⁺ Swainson's Hawk, 10 Mississippi kites (a pair building a nest) - incl. adults + 1st-yr. birds. Scaled Quail?, ²⁰ Bobwhite Quail, 5 Killdeer, Rough-w. Swallows, ² Eastern Phoebe, 15 East. Kingbird, 10-15 Western Kingbird ²⁰⁺ Scissor-tailed Flycatchers, 5 Red-bellied Woodpeckers, 10 Yellow-billed Cuckoo, 5 Rock Wren, 1 Canyon Wren, 5⁺ Chuck-will-vidow, ¹⁰⁺ Carolina Mockingbird, Brl. Warbler, Screech Owl (calling), Amphispiza ruficeps, 10⁺ Tufted Titmouse, 10⁺ Carolina Chickadee, 5 Bluegray Gnatcatcher, Lark Sparrow?, ~~Red~~ ⁵ Bewick Wren, Meadowlark (EOW?), Mourning Dove.

The areas around streams + lakes (man-made) are fairly wooded. The area is under Federal control + there are publications on the ~~state~~ wildlife of the area. My bird list is not complete.

R.M. Zink

1982

Journal

Wilburton area, Latimer Co., Oklahoma

1-3

June

Starla Vanderpool, Doris Watt + myself left Norman for the Wilburton area. ^(eastern OK) They are conducting quantitative vegetation surveys on reclaimed + unreclaimed coal strip mines, for the Oklahoma Biological Survey. The areas I hunted were open pastures + riparian vegetation along streams, + semi-mature deciduous forest. It has been a very wet summer so far + many of the areas are flooded or at least have lots of standing water. The birds I saw are representative of this type of vegetation + ~~are~~ are described in Sutton's Birds of Oklahoma, + his Checklist of Oklahoma Birds (publ. 1974 by Strickland Museum). I did see lots of Parus bicolor, Parus carolinensis, Coturnix virginiana, Tyrannus tyrannus, Muscivora forticatus. However, the forest is not mature enough for Empidonax virens - or at least not mature floodplain forest.

3-4 June

Stigler area, Haskell Co., Oklahoma

I spent the day hunting an open area of ^{white} ~~clay~~ ^{clay}, on an old strip mine. There were lots of Dickcissels, Lark Sparrows, + fewer Grasshopper Sparrows. I saw only 1 Ernythila alpestris (RMZ 2000) - there were prob. a few pairs, but not lots of good (bare-ground) habitat. There are some good patches of forest, although private. There was a spectacular thunder-lightning storm, complete with blackened skies + high winds.

R.M. Zink

1982

Journal

Mc Curtain area, Haskell Co., Oklahoma

5 June

I hunted a fairly mature riparian forest (along a flowing, apparently permanent, creek), hoping to find Acadian Flycatchers. However, it was prob. not mature enough forest - although I did encounter ^{one coll.:} a family of Pilated Woodpeckers (RM 2013).

6-9 June

4-6 mi. N McCurtain (ind. Sans Bois Creek), Haskell Co., Okla.

I spent parts of 7, 8, + 9th June along the floodplain native forest along Sans Bois Creek, where I found a good population of Empidonax virens, as well as other birds typical of the habitat: waterthrush, Kentucky Warbler, Red-eyed Vireo, Barred Owl, etc. Surrounding the floodplain forest are oak forests/woodlands + pastures. I saw a Black Vulture on 7 June, and ~~saw~~ heard screech + Barred Owls, waterthrush, Kentucky Warblers. The imm. Roadrunner (RM 2039) was part of a family group. The E. Wood Pewee (RM 2026) was perched on a fence next to an oak woodland, w/ a shrubby border.

- in Norman 10-13 June

7 mi. SE Vian, Sequoyah Co., Oklahoma

14 June

I hunted a shrubby pasture/woodland, that had lots of Indigo Buntings & Baird's Warblers. I coll. a Red-eyed Vireo in a thicket. The Killdeer was on a nearby road.

R.M. Zink
1982

Journal

5 mi. W Round Mtn., McIntosh Co., Oklahoma

15 June

I drove roads in this area for general bird collecting. There's a fair bit of good habitat, w/o too many farm houses.

R. M. Zink
1982

Journal

Berkeley, California to Darby area, Ravalli Co, Montana

28 June

Left Berkeley 5:00 p.m. + drove to Winnemucca, Nevada.

29 June

Drove to Wells, Nevada, then N to Twin Falls Idaho, + N to Arco, + Challis, where I spent night. It took from 0700 to 11:30 p.m. for this drive - so, it's not a quick jaunt (this is partly due to my VW bus, which is not the speediest vehicle), Nice drive though.

30 June

Drove to Darby, Montana + picked up my Montana Scientific Collecting Permit at B.O. I then proceeded to one of Ned K. Johnson's old collecting sites for Vireo solitarius - Boulder Cr. Campground. (See catalogue), where I arrived about noon. I heard a Solitary Vireo within 10 min. of arrival (RMZ 2052). However, I did not encounter others in an evening hunt, although it clouded up + rained briefly. It has been an extremely wet winter + spring here, including recent heavy rains. The campground seems to have fewer Ponderosa Pines than prob. necessary for higher nos. of Solitary Vireos. Drove to Little West Fork of Bitterroot R.

1 July

I hunted from Little West Fork of Bitterroot R. to Faded Flat Campground (all along For. Ser. Rd. # 468). I coll. a Solitary Vireo at Little West Fork in morning (before a heavy rain). All along the road (468) there is lots of forest, but mostly ^{spruce} fir + lodgepole pine. I drove up numerous roads but found no areas with a sufficiently

R.M. Zink
1982

Journal

~ 7 mi S Trapper Peak, Ravalli Co. Montana

1 July
(cont.)

high density of Ponderosa Pine for Sol. Vireos. There are some stands, but they seem too young or sparse. However, at the site of RMZ 2053, there ~~bird~~ was in a dense, wet stand of ~~the~~ spruce, bordering a somewhat more open area with lodgepole + Ponderosa Pines. It was overcast + cold all day. There has been lots of rain lately, plus a heavy snow fall this winter, has made the streams very high. In some places along the W Fork Bitterroot R., the spruce forest is boggy.

⁻³

2 July

^{3/4} mi. N, 4 mi. E Trapper Peak, 1050 m, Ravalli Co. Montana

I drove to this site from just S of the Trapper Cr. CC Center, and parked along Pierce Creek. I spent the next couple days here. There are scattered areas of Ponderosa Pine, of medium ht., that had Solitary Vireos, and there were 15 or so Hammond's Flycatchers, especially along the dense spruces along Pierce Cr. I hiked over much of this area. The forest thins out higher up. The Sol. Vireos were seemingly bunched in territories near Pierce Cr. I collected 4 singing ♂♂ within about a 200m x 200m area. They were singing sporadically throughout the day. Intervals between an individual's songs were often 30⁺ min. There was seemingly more habitat, especially N of the junction of Pierce Cr. + the road, that seemed good for Sol. Vireos, but I heard none on the morning of 3 July during a 2 hr. hike through the area. The 3 I coll. today were

R.M. Zink
1982

Journal

3/4 mi. N, 4 mi. E Trapper Peak, 1658 m, Ravalli Co, Montana

2-3 July
(cont.)

all near Pierce Creek. Some of the pine-spruce habitat N of Pierce Cr is probably (possibly) too mature (a too little understory/canopy) for Sol. Vireos. They ^(singing ♂♂) seemed to be in stands of med. ht. + rel. open Ponderosa Pine (yucca Lodgepole) + maybe near denser stands of pine, spruce, + deciduous trees (along streams). Weather was cool to cold, mostly cloudy with some rain.

4 July

I moved slightly ~~NE~~^S, along road to the S of Baker Lake Road. There's a good stretch of med. ht. Ponderosa Pine along road (plantation), plus some streams w/ dense vegetation. I drove a ways + walked, listening for Sol. Vireos. It was cold, cloudy, + rained for ~1 hr. I coll. 4 Sol. Vireos. They were singing sporadically. When I heard one sing, I hurried to the spot + looked for the bird. They were not too responsive to squeaking or jisting, but sometimes sang when you approached. I had been in 1 spot for ~45 min. before a male sang once. Females must be on nests. Away from the road there were both more open + dense stands of pine + spruce, plus rather open grassy areas.

In the afternoon, I decided to check out other areas the USFS in Darby said had good Ponderosa. I drove to Vista Pt. (view of Trapper Pk.), but found little suitable habitat. I did hear 1 Sol. Vireo

R. M. Zink
1982

Journal

Trapper Peak area, Ravalli Co., Montana

4 July
(cont.)

on top of a hill next to the road, it charged up & waited 30-40 min, but it never sang again. A big rain storm moved in. The area along this road has too few stands of adequate Pond Pine for Sl. Vireos, at present.

I also drove the road along Trapper Cr., where there are lots of conifers. I next tried the road, through Robbins Gulch, towards Doran Pt. I went about 4 miles in, but the best area for vireos was from the cattle guard (~1.5 miles in) to 1.5 mi. (to a big rock, cut out partly, along road). There were good amounts of pines. At a corral, owned by a cattle company but on forest service land, I heard 2 Sl. Vireos singing at 8:15 pm. (RHZ 2083, 84). I camped here for the night.

5 July

I hunted the area $\frac{1}{4}$ mi. S, $2\frac{1}{2}$ mi. W Doran Pt. in morning, & coll. 5 Sl. Vireos. It was cold, overcast & a slight drizzle fell most of the morning. It was a ^{very} good spot for vireos, as I coll. 7 (2 yesterday & 5 today) & left much of the habitat unsummed. Also, the poor weather undoubtedly reduced singing levels. I worked on specimens until early afternoon, then decided to hunt for Sphyrapicus varius, as I have only 2 so far. [Empidonax hammondi were also common especially along stream beds].

I went to Darby & asked about higher elevation open stands, where I thought sapsuckers might be found.

R.M. Zink

1982

Journal

Lake Como area, Ravalli Co., Montana

5 July
(cont.)

I was told at sport shop to try E of Lake Como. I drove to Lk. Como, & S to Little Rock Creek Trailhead. I did not find suitable sapsucker habitat here, but I did coll. a pair of Sol. Vireo from some pines along the road. I returned & camped at gravel pit, $\frac{1}{2}$ mi. E of Lk. Como, because I had seen numerous sapsucker drillings in the aspens along Rock Creek on my way to Como Lk., plus I saw 2 sapsuckers.

6 July

I walked from the gravel pit E, on the S side, of Rock Creek, which is very full & fast-running. There are good stands of aspen & cottonwoods along the creek, & I coll. 5 sapsuckers. 2 Two pairs were feeding nestlings. There were also other deciduous forest species such as Amer. Redstart, Red-eyed Vireo, and in an ^{open, wet} area of Salix, I heard a singing Empidonax traillii (i.e. "fitz-bew"). About 40 yds from the willows, across an open, wet ^(RMZ 2103) grassy area, I coll. a ♀ E. traillii. The bird was foraging low to ground amidst some dead/dying standing & fallen spruces. I suspect there were several other pairs of sapsuckers, but I didn't feel like crossing the Rock Cr. Also, there was a few houses on the N side of the creek.

In the afternoon, I drove down the West Fork of the Bitterroot R. (again) to Painted Rocks Lake. There are some aspen/cottonwood stands, but mostly from the Tongue Cr. CE str. to the Bitterroot R.

R. M. Zink
1982

Journal

S of Parby, Ravalli Co., Montana

6 July
(cont.) I hunted a couple areas, but there were no signs like the one I hunted this morning, for sagsuckers, & I saw no signs of sagsuckers. I decided to head back to Berkeley, & got to S of Challis, Idaho.

Challis, Idaho, to Berkeley, California

7 July I drove from 0530 to midnight, arriving Muz at 1230 a.m. on 8 July, & saw a Prairie Falcon near ~ 30 mi. N of Twin Falls, Idaho, & a Golden Eagle ~ 20 mi. W of Elko, Nevada.

R.M. Zink

Journal

1982

Bird list, Darby area, Ravalli Co., Montana

30 June - 6 July (see RMZ catalogue for precise localities)

- Turkey Vulture 2 Bitterroot Valley
Red-tailed Hawk 3-4 to 7000'
Ruffed Grouse 3 found remains of Gray phase bird,
1 ♀ w brood, which could fly but
were small on 6 July
Spruce Grouse ? 1 prob. ♀ on 5 July
Great Blue Heron 1 lower end of Bitterroot valley
Spotted Sandpiper 2 along W Fork Bitterroot
Common Snipe 4 30 mi. S of Bitter. Valley
Mourning Dove few in valley, along River
Gr. Horned or Barn Owl 1 quick look
Common Nighthawk 10 evenings + afternoons on
cloudy days
White-throated Sw. A 10 along ridges
Calliope Hummingbird 15 along streams
Belted Kingfisher 1 along Bitterroot
Common Flicker few " streams
[Lewis Woodpecker 3+ 30+ mi. S Bitterroot Valley]
Downy Woodpecker 4+ 1 fading young at nest hole
along Rock Creek
Hairy " 4+ " " " , the places
Yellow-bellied Sapsucker 6+ - mainly along Rock Creek,
only the 2 encountered were
collected (RMZ 2054, 2059).
Traill's Flycatcher 4+ willows along Rock Creek. 2 males
singing, definite "fitz'-brew" on 6 July.

R.M. Zink
1982

Journal

Bird list, Darby area, Ravalli Co., Montana (cont.)

30 June - 6 July

Hammond's Flycatcher 40+ v. common in fairly open
coniferous forest, along stream, +
road cuts.

Dusky " 1? coll. (RMZ 2075) in small,
open wet grassy area near stream
(densely vegetated) + conif. forest.

Western Wood Pewee few along Fork A. + Bitter R.

Olive-s. Flycatcher " higher (6000'+) in open conif.
forest

Barn Swallow several along Bitter R.

Rough-n. + Tree Swallow " " " " (didn't check)

Stellar Jay few conif. forest. Scarcely sky.

[Bl.-billed Magpie common in N Idaho, S of B.H. Valley.]

Clark Nutcracker 1 on 2 July

Common Crow few

Mt. Chickadee 15-20 conif. forest

Bl.-capped " ?

White-br. Nuthatch 1 pine (Lodgepole + ponderosa)
forest at site on 5 July

Red-br. " 10 conif. forest. 1 family group

Robin 40 forest + offerings

Townsend Solitaire 5 forest

Hermit Thrush few "

Swainson " 20 "

Ruby-cr. Kinglet 50 " Singing.

R. M. Zink
1982

Journal

Bird list, Darby area, Ravalli Co., Montana (cont.)

30 June - 6 July

Golden-cr. Kinglet	few	forest
Cedar Waxwing	"	Rock Creek
Solitary Vireo	25+	conif. near - see catalogue
Warbling Vireo	5+	deciduous vegetation along streams to at least 6000 ft.
Red-eyed "	5	along Rock Creek.
Orange-cr. Warbler?		open, young pines/slash, ^{singing}
Yellow "	10	along streams
Yellow-rumped "	50	forest
Townsend "	10	"
Yellowthroat	few	Rock Creek
Mac Gill. Warbler	10	vigarian
Am. Redstart	few	Rock Cr.
Red-winged Blackbird	20	Bitter. Valley
Brewer "	20+	" "
Yellow-headed "	20	" "
Brown-h. Cowbird	30	forest (conif.)
Western Tanager	100+	" V. common.
Bl. h. Grosbeak	20	along streams, dense vegetation
Evening "	50+	forest. Saw 1 fledgling,
Lazuli Bunting	10+	forest edge
Cassin Finch	5+	~7000' near Como Lake
Pine Siskin	50+	forest
Red Crossbill	60+	2 lge. flocks
Dark-eyed Junco	50+	open conif. forest, edge

R.M. Zink
1982

Journal

Bird List, Darby area, Ravalli Co., Montana

30 June - 6 July

Chipping Sparrow 50+ open forest, open areas

Fox Sparrow 2 1 song ♂ at Little West Fork
Bitterroot River

Song " 1 Rock Creek

Note: This list is very subjective. I did not systematically survey the avifauna or run down songs I didn't recognize. Abundances reflect time spent in various habitats & prob. are generally poor indicators of actual abundances (Junco, Chipping Sparrow, White-throats were very common).

R.M. Zink

1982

Journal

2/10/82
not on 2
5

New York to Costa Rica

16 Aug. George Barrowclough, Barbara Barrowclough and I flew to Miami, Fla., & then to San Jose, Costa Rica. We stayed at the Hotel Galilea, which gives a 10% discount (maybe) if you mention OTS.

17 Aug. George & I went to the Dirección Forestal to arrange a bird-collecting permit. We had to talk to Eduardo Lopez P., however, he was gone until the 19th. We spent the rest of the day getting supplies. Bob Timm & Joe Wunderlee, co-coordinators of an OTS course, arrived. We talked over potential collecting sites. ^{we went to Univ. of Costa Rica} ~~We also~~ and tried to find Rafael Campos, an assistant of Gary Stiles, who was to loan us a 16 g. shotgun. Rafael was not there, however, I got his phone number (home - 25-74-62), I called him & he agreed to meet us the next a.m. We also talked to Prof. Barrientes, who arranged to get our liquid nitrogen tank filled (nitrogeno liquido).

18 Aug. We spent the day getting supplies. We met Rafael Campos - he speaks English quite well & has led bird tours. George & I looked through the bird collection in the a.m. Gary Stiles has accumulated a good syntopic

R.M. Zink

1982

Journal

San Jose, Costa Rica

18 Aug.
(cont.)

collection. I copied locality data for Empidonax atriceps, flavescens, & albigularis, and George looked at T. vulcani. We returned to the OTS office & our vehicle wasn't ready.

19 Aug.

George & I returned to the Permit office (Avenida 2, between Calle 6 y 8) & found out that we could have a permit for 2 of most birds. However, we wanted more of several species. We then found out that we needed a "projecto", or project proposal; we also had to list all the remaining species (scientific names) that we wanted 2 ^{specimens} ~~birds~~. We then got the permit & went to OTS & got the Land Rover.

We headed out of San Jose (with Bob Timmer) along Ruta 2 to Cartago & on to the top of Cerro de La Muerte. We stopped at a sphagnum bog along the left side of the road about 5-10 km N of summit, where Bob T. had seen a Quetzal a week before. We saw 0. We went on to the turnoff (dirt road) to Cerro de La Muerte & hunted for 2 hr. It was cold & misty. GFB got 2 Turdus vulcani & I got 2 Turdus nigricans & 1 Chlorophanes pileatus. We then went to the restaurant La Georgina, which also has a few rooms. However, they

R.M. Zink

1982

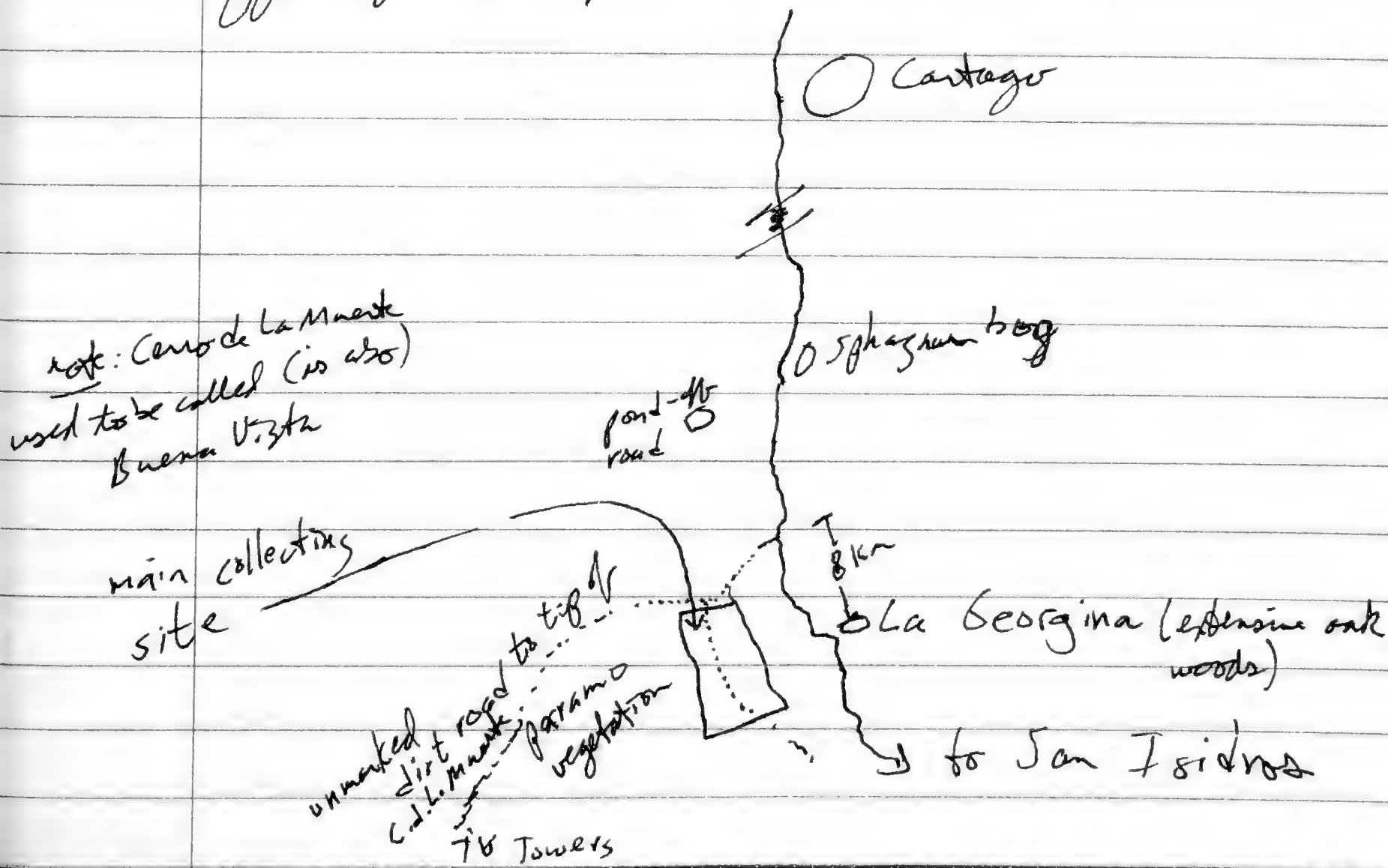
Journal

19 Aug.
(cont.)

vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica
said they had no rooms (OTS courses regularly
stay there). Thus, we continued (down) 45 km
to San Isidro, where we stayed the night.
(The road from La Georgina to S. Isidro is
v. windy + steep). Saw Tropical Kingbirds +
Cassidix mexicanus.

20 Aug.

Drove back to C. de La M. + let Bob T. +
George hunt, while Barb + I returned to
La Georgina to get a room. we got rooms for
\$100/person/night. The present exchange rate is
\$1.00 (U.S.) = 59.4 colones (#). Barb + I returned
to the Cerro road + put up some nets. The
approx position of this site is:



R.M. Zink
1982

Journal

Vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica

20 Aug.

Throughout the day we hunted in the area of the dirt road off of the main road to Cerro. We got 4 *T. junco* + 2 *E. atriceps* [all birds in Catalogue of G.F. Barondough - Amer. Mus. Nat. Hist.]. The weather was cold, windy + misty/raining all day. It is very high (~3400m) + steep in places. The vegetation is typical paramo, with woods in gullies + riparian situations.

21 Aug.

The battery in Land Rover was dead, so I hiked to San Isidro, bought a new battery, + took a bus back to where we left the car, 2 km from La Georgina. Bob T. + George walked to the Cerro, took down the nets + walked back to La Georgina. We decided to set in the extensive oak woods + bamboo thickets behind La Georgina. Bob T. + I went back to the Cerro in afternoon (had a flat tire) + got 1 *E. atriceps*. It was still cold + windy.

22 Aug.

We returned to the Cerro. Bob T. + I took the 410 + looked for *E. atriceps*, but saw only 1, which I collected. I decided that this site was too high + open for maximum *atriceps* density. Although they are in typical paramo vegetation, they seem more common

R. M. Zink

1982

Journal

22 Aug.
(cont.)

Vicinity of Cero de La Muerte Prov. Cartago, Costa Rica
in areas with more woody vegetation (small trees + large bushes, but with open areas proximate). Thus we returned to La Georgina [Telephone for La Georgina is 71-12-99 - it's a public phone outside, but rings inside]. Bob T. & I walked across road from La Georgina. A dirt road goes through second growth, with openings + a few remnant trees + Alder-like stands. Here we found E. atriceps common, as they sallied out from large bushes + small trees, from 1m to $\approx 20m$. Bob T. & I collected 6, plus a Vermivora gutturalis + a "Buffy Tufted Chick". We returned to La Georgina + I worked on birds. We netted 2 Otus clarkii in a.m. It rained very hard for $\approx 1hr$. George + Bob T. returned to this area in late afternoon + coll. 1 E. atriceps + a cacique.

23 Aug.

We went down road across from La Georgina for about $1\frac{1}{2}$ miles. It goes through second growth + some nice stands of woods. We encountered flocks of birds sporadically + got 5 E. atriceps. We returned to La Georgina + took down nets, + headed back to San Jose, arriving 4:30 p.m. Bird list follows.

R. M. Zink

1982

Journal

vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica

19-23 Aug.

Cerro de La Muerte = CM

La Georgina = LG (prob. called Pension Georgina by some)

San Isidro = SI

Turkey Vulture 2 SI

Black " 2 "

Red-t. Hawk 1 on 22 Aug., at LG - adult

Band-tailed Pigeon 10 LG - males calling in a.m.

Sulphur winged 10 } GFB saw Sulph. winged & ♂

Barrel parakeets 10 } saw Barrel - but not 100%, for ^{either}

Otus clarkii 2 netted at La Georgina

Green Urodeer 1 netted at LG

Panthera insignis 10 common at LG. netted some

Erag w/ pollen mites on head/bill.

Erag fulgens 15 netted LG or seen commonly.

Selasphorus flammula 15 common at CM + LG

Acorn Woodpecker 1 probable (heard at LG).

Spot-crowned Woodcreeper 1 coll. at LG

Ruddy Treerunner 2-4 in flocks of Chlorospingus in woods at LG

Buffy Tufted Cheek 2 " " "

Euphonia striata 25+ see sp. account.

Blue-White Swallow 1 LG

Timberline Wren 5 GM } Jimenez saw 2 wrens

Ochraceous " 1? at CM }

Turdus nigrescens 20 CM, LG - common.

Catharus ^{gracilirostris} 15-20 CM + LG (common)

R. M. Zink

1982

Journal

Vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica

19-23 Aug.

(cont.)

Vireo carmioli 15 common at LG + CM in trees
at CM. Song v. slow + buzzy
+ a lot like V. solitarius.

Piglossa plumbea 30 common at CM + LG. I caught
a fledgling (picked by R. M. Tin-
Field Mus Nat. Hist.)

Vermivora gutturalis 5 woods at LG

Dendroica townsendi on

Vireo (prob. virens) 1 at CM

Myioborus torquatus 5 woods at ~~CM~~ LG

Basileuterus melanogaster 4 " " LG

Yellow-billed Cuckoo 1 at LG (coll. R. M. Tin-).

Cassidix mexicanus 1 S +

Sturnella magna 1 near Cartago

Chlorospingus pileatus 20 common at LG + CM

Pezopetes capitalis 15 " " " " - on

ground at forest edges

Yellow-thighed Finch 1 - on road below (20 km CM)

Toucan vulcani 40 CM - common. see notes
of G. F. Barrowclough. In some
ways they look like typical
juncos. Long calls, however, sound
more varied + complex. Towards
dusk they give a high ^{series of} rattle, usually
in pitch.

R. M. Zink
1982

Journal

Vicinity of Cerro de La Muerte, Prov. Cartago, Costa Rica

19-23 Aug
(cont.)

Zonotrichia capensis 40 common along road
from San Jose to CM.

also

Thripadectes rufobrunneus 1 coll. RMZ at woods
at CM.

1 Pewee? ~~pos.~~ heard at LG

Note: There are many references to birds
of Costa Rica. We're using the "Locational
checklist of the birds of Costa Rica" (1980) © by
T. James Lewis & F. Gary Stiles. Sibley (1969)
Birds of Costa Rica is also useful. We have a
checklist of birds of Monte Verde, also. However,
the birds at Montverde (a Quaker community) are
protected there is a strong bird-watching factor there.

vicinity of Punta Arenas, Costa Rica

24 Aug.

George, Barb + I headed towards Cañas +
Punta Arenas, ^{saw cloud swift along route - white above neck, not below} from San Jose. We were headed
to a virgin patch of Shorea forest, a palm.
The site is about .7 km N of Cuatro Cruces,
~~off~~ ^{on} the main highway. It is a mostly undisturbed
primary forest, about $\frac{1}{2}$ mi. x $\frac{1}{2}$ mi. (at least). The
spot is on the W side of Hwy. 1; we stayed in
Punta Arenas, which was hot + not real tranquilo.
There are groves in this forest that are somewhat
disturbed, & have considerable shrub + ground

R.M. Zink

1982

Journal

vicinity of Punta Arenas, Costa Rica

24 Aug.
(cont.)

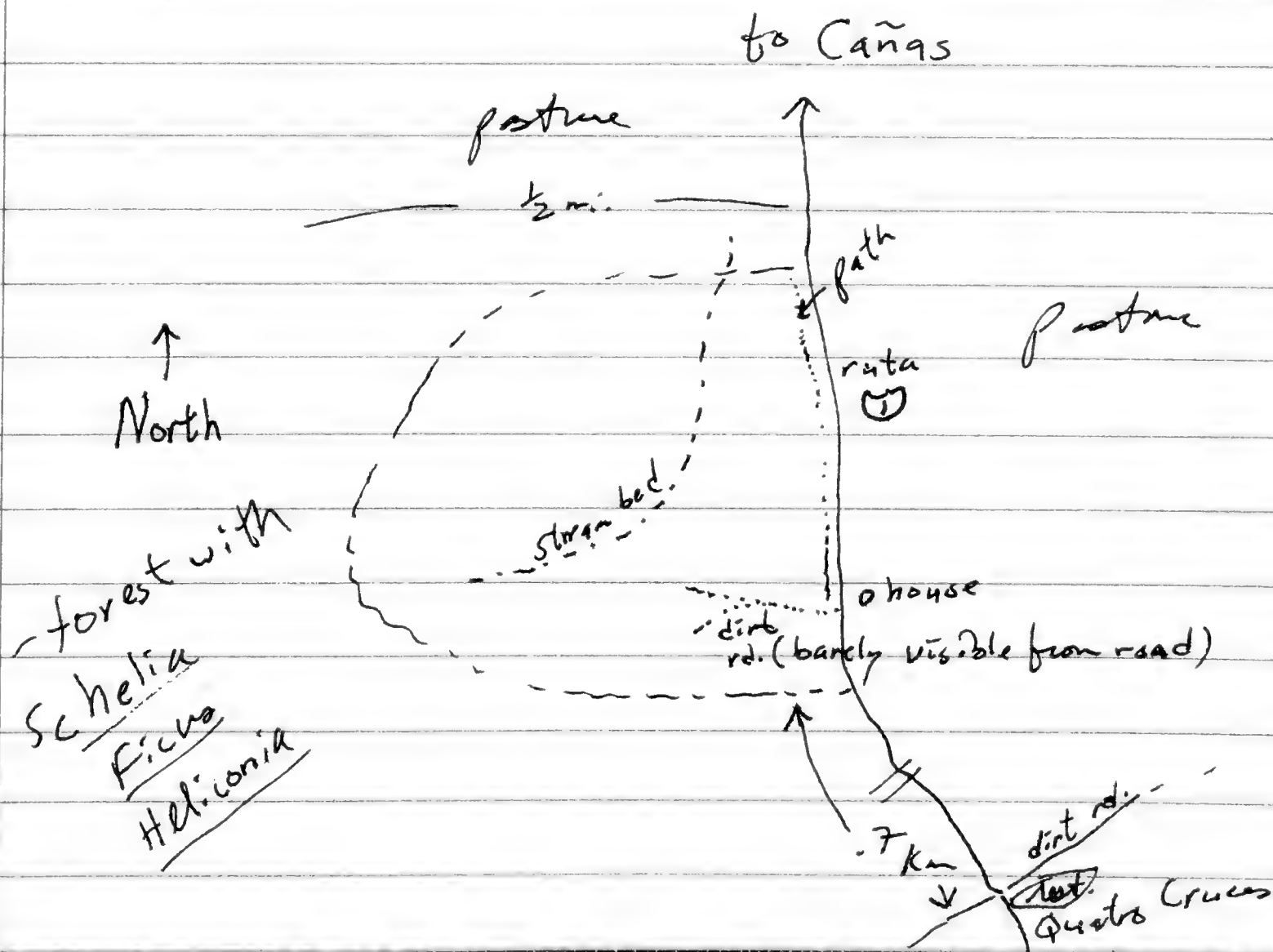
cover.

There were ≈ 2 troops of Howler monkey.
Other mammals included a squirrel + bats (Uroderma).
Bob Timm found a nest apparently made by a
species of Uroderma, of which he collected 5 from
one roost.

George + I set nets. We returned to
Punta Arenas for the night.

25 Aug.

Bob, George + I drove to the palm (+ other
trees) forest. We spent the day hunting +
running nets. The site looks like one of the
few undisturbed primary sites around. Its
location is:



R. M. Zink

1982

Journal

vicinity of Punta Arenas, Costa Rica

25 Aug.

(cont.)

It was very damp & rained both yesterday & today in afternoon. There are lots of large figs. There are a few paths through the woods. Some of the large Ficus are probably 100⁺ ft. Bob Timm said that Bob Jantzen has worked here but couldn't determine who owned it.

See G. F. Barrowclough catalogue.

Bird List:

tinamon? heard

Turkey Vulture 5 overhead

Black " 5-10

Laughing Falcon 1 prob. overhead

~~Common Black Hawk~~ 2 prob. (pair) - forest
prob Gray Hawk

Canopy. Calling vigorously
on 24B.

Crested Caracara 2 near woods in tree in
pasture

- Both a large & small forest

pigeon spp.

Amazona spp.

several

~~10-15~~

overhead

Aratinga canicularis? 10-15

"

+ forest edge

→ Green-billed Ani: 25

Squirrel Cuckoo - 6-8

forest edge

owl spp.

- heard at dusk. High pitched, series
of 3 rather long notes, varied
speed.

hummers - not a lot of spp. see GFB's catalogue
for 1 collected. (Amazilia tzacatl)

R. M. Zink

1982

Journal

vicinity of Punta Arenas, Costa Rica

25 Aug.
(cont.)

Trogon - prop. violaceus 1 edge of pasture/wood in
the over road!

Ringed Kingfisher 2 Rio near the forest.

motmot spp. - racket-tailed. edge of forest.

Lined Woodpecker 1 light gaps in forest.

Melanerpes hoffmanni " " " " " darker

Glyphorhynchus spirurus 1 forest } often trees with
figs + vines.

Dendrocolaptes certhie 1 " }

Xiphorhynchus flavigaster 2 " }

Lepidocolaptes souleyetii 2+ " }

Note: conspicuously absent were formicariids +
formicariids.

Chiroxipha linearis 1+ coll. GFB

Attila spadiceus 2? heard R12

Platypsaris aglaiae 3 forest (disturbed) - coll. R12

Tityra sonifaciata 2 " edge. coll. R12

Kiskadee 2 edge of forest

Myiodynastes maculatus 2 forest canopy (disturbed ^{area})

Tolmomyias sulphureus 1 coll. GFB.

Oncotoma cinereigularis 5-10 low in shrub growth
in disturbed areas of (closed)
canopy/forest

Myiospiza viridicata 1 light gap in forest - coll. R12

Rufous-naped Wren 10 forest - edge gaps

Rufous & White Wren 2 retted along stream bed

R.M. Zink
1982

Journal

vicinity of Punta Arenas, Costa Rica

25 Aug.
(cont.)

Turdus grayi 5 forest.

Vireo flavoviridis 2 " edge - coll. 1-RMZ

Arremonops conirostris 4 " " - coll. 1-RMZ.

Atlapetes

+ Amer. Redstart - in forest, 1 - coll. 1-RMZ.

26 Aug.

George, Barb + I returned to the site. In Punta Arenas I saw 20+ Brn. Pelicans, 20+ Mas. Frigatebirds, 2 lgc. terns (coo:un?), 40 Gr. + G. Gnatcatchers, parakeets. We took down nets & hunted until noon.

We then headed down Ruta 1 towards Lañas. We took the turnoff to Monteverde, which bears to the N at a store + bar, about 15-20 km N of the forest. We arrived in Monteverde about 4 p.m. & got a room at the Pension Quetzal, which I highly recommend. The food is very good, rooms very nice & scenery great. It is, of course, a headquarters for birders. One of the persons in charge, Bob Law, is a member of the local Quaker community & a wealth of info on the birds of the area.

27 Aug.

We walked to the Monteverde Cloud Forest Reserve from Pension Quetzal. There is a nice booklet on the birds of Monteverde we saw, actually very little; therefore I won't make a list. It was

R. M. Zink

1982

Journal

Monteverde, Costa Rica

27 Aug
(cont.)

very windy, misty + cool. We did see Three-wattled Bellbirds + Resplendent Quetzals. Bob Law said the best birding is the 1st 3 wks. of April. The months with least rainfall are Feb.-April. I bought copies of the bird, mammal + herp lists, as well as a general info booklet, + these should be consulted for further info. I believe the Pension Quetzal can be telephoned. There is another local pension (Flor Mar) + hotel (Montana). I could not recommend a place in the area we traveled in Mexico + S.A., more than Monteverde + prob. Pension Quetzal. The cost per person was 350 colones/day (current exchange is 59 colones/1 dollar U.S.).

We headed back to San Jose in afternoon. We saw a Lesser Ground Cuckoo along road.

Volcan Barba, Costa Rica

28 Aug.

George + I left San Jose at 7:30 a.m. for Volcan Barba, where F. Gary Stiles said we'd have no trouble collecting Enigdonax flavescens. We went to Heredia, then to San Jose de La Montaña, + continued up. There are lots of residences along route + few places to shoot. It was windy + cool. We stopped along several streams + worked but saw little. We continued to ^(needing 4-wheel drive)

R. M. Zink

1982

Journal

Volcan Barba, Costa Rica

28 Aug. (cont.) The end (we think) of Ruta 114 ($\approx 2300m$). Here we took off on foot along a path up into cloud forest. We did not find E. flavescens, poss. because of weather, time of day (11:00 am) or elev. (2300m). We saw birds ~~as~~ we saw at La Georigina (Cerro de La Muerte), such as the collared Redstart, Buff-breasted Tanager (coll. R112). We saw no E. strigata. I coll. a Zeledonia coronata as it skunked in dense vegetation along the path. There were also Chlorospingus + Ruddy Turnstones. ^{saw tanagers. Birds typical of cloud forest.}
~~See GFB notes for a spp. list.~~

We then went down to San Jose de La Montaña & took a dirt road north (part of the road is called "Calle Higuera"). This road requires 4-wheel drive near its junction with the road which goes N from Montecito. We spent about $\frac{1}{2}$ hr. at the junction of these roads working on specimens. There is a stream, with some willow-like trees & shrubs. Here I saw 2 foraging E. flavescens, which I was able to collect. The stream bed is very deep ($\approx 12-15$ ft.) & narrow, & I had to climb down to retrieve one bird.

Next, we drove up the rest of the way on the road from Montecito - you could go further but we decided to walk. There is fairly dense shrub & trees along the road & we coll. 1 more E. flavescens before dark. There are pastures & woods & several

R.M. Zink
1982

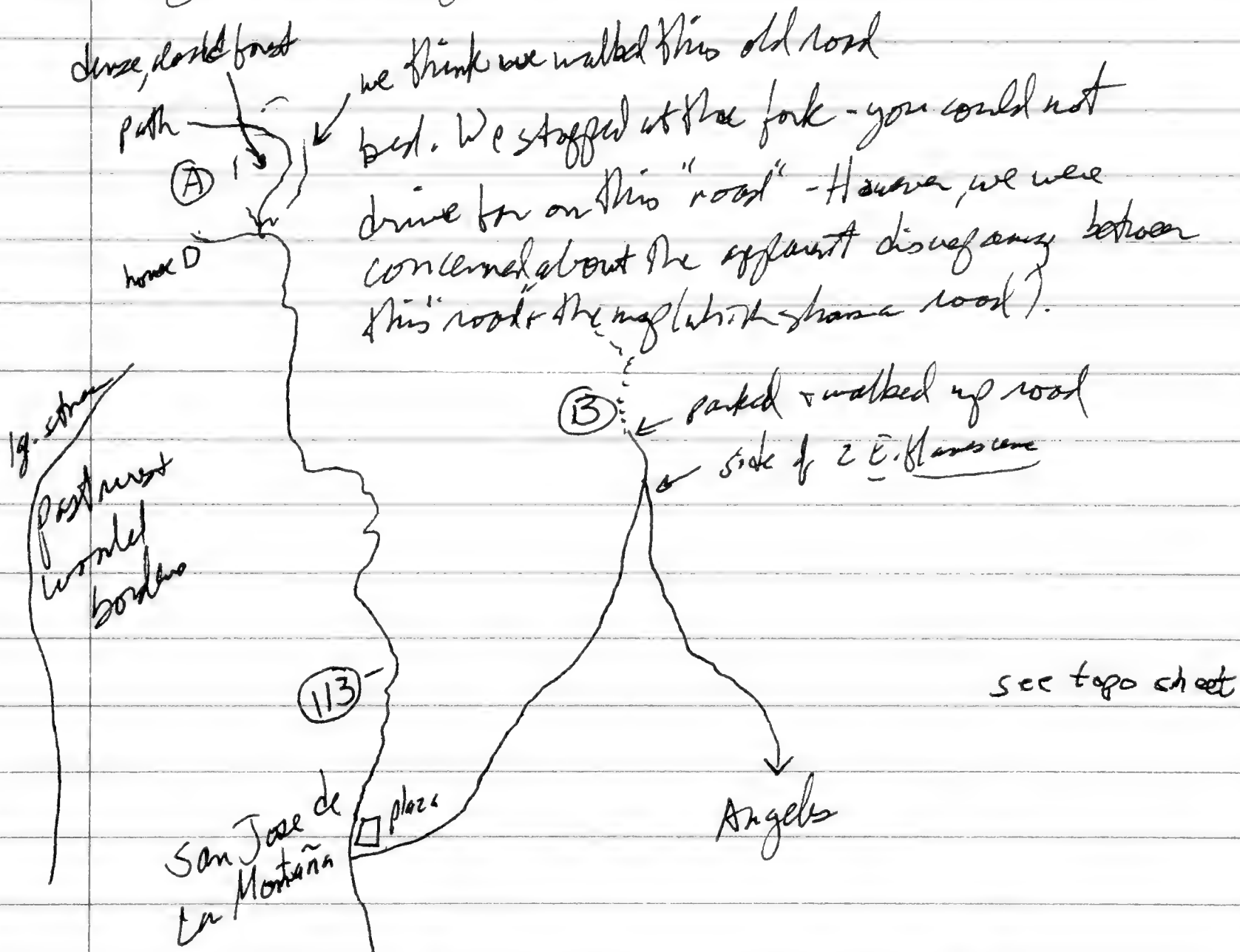
Journal

Volcan Barba, Costa Rica

28 Aug.
(cont.)

areas looked good for E. flavescens.

The areas we worked today are on a taffer I bought & are regional:



I think that both sites A & B would be good collecting sites. In much of the rest of the surrounding area there are too many people's houses.

Birds we saw included Z. capensis - v. common, a Turdus, Yellow-throated Finch? (yellow on flanks), +.

R.M. Zink

1982

Journal

Volcan Poas, Costa Rica

29 Aug.

George, Barb + I went to Volcan Poas via Vara Blanca. The terrain is similar to that we saw yesterday on Barba except there are more coffee fincas. At Km 20, we stopped at a stream that had riparian vegetation, + I coll. a E. flavescens - there's a house nearby so prob- not good for major collecting. We continued on to where rd. 120 goes west towards Poas, just S of Vara Blanca. There are lots of pastures + stands of alder-like trees. We went west 2½ miles, per N.K. Johnson's directions, + saw a stream below on our left, across a pasture. The area was all fenced off, but I found a road which goes down through the pasture, parallel to the main road (badly deteriorated), + leads to a couple of large ^{modern} barns. Here we asked permission to go to the river + collect. George + I spent about 1 hr along the stream. I got 2 E. flavescens + 1 hummer. The vegetation was typical montane, cloud forest. We saw tree creepers, Emerald Toucanets, Chlorospingus, + other cloud forest spp. However we were there for only a short time, + it was cold + rainy.

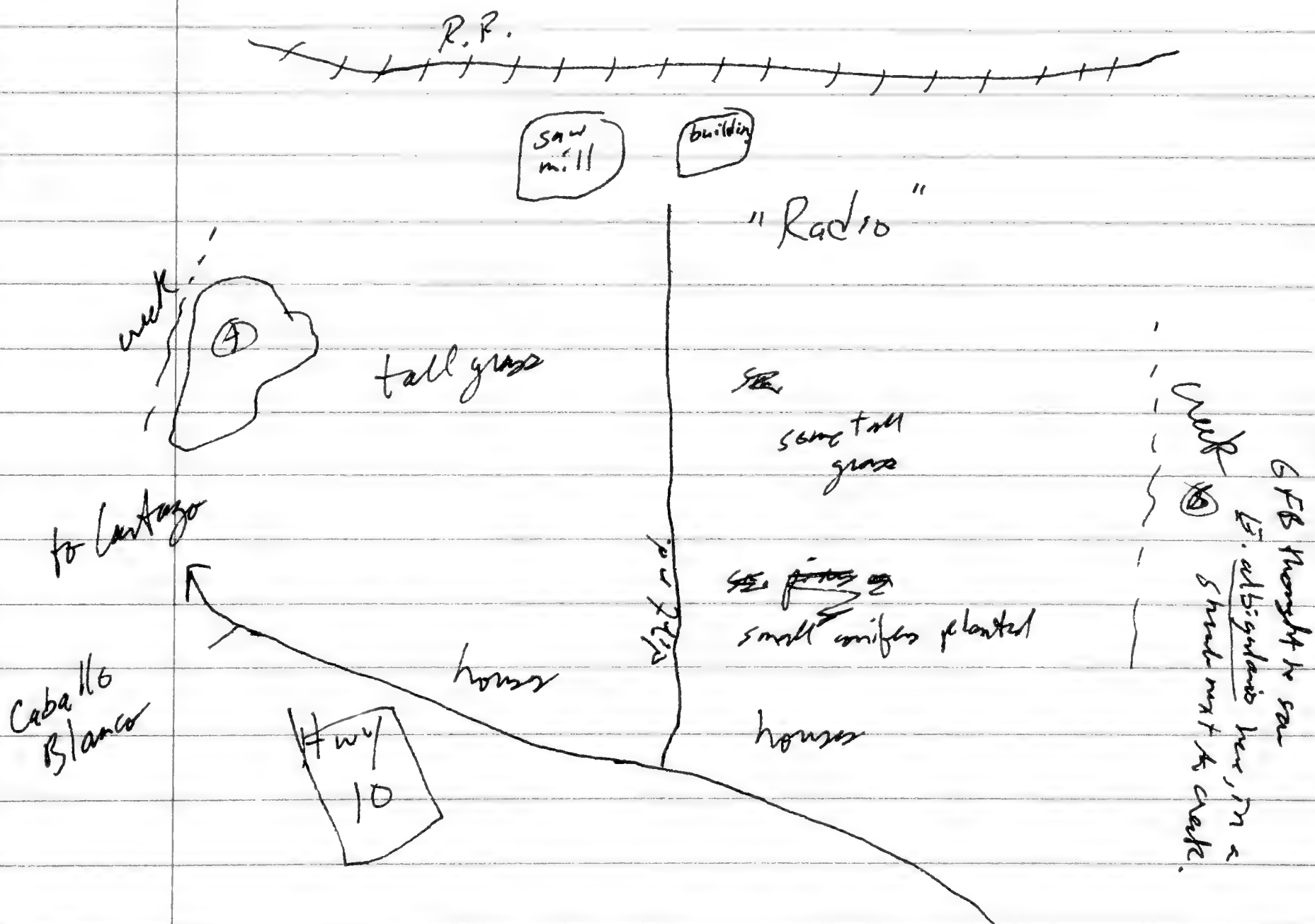
We drove on to V. Poas but the weather had turned from cold + drizzle to rain. We returned to San Jose.

Journal

vicinity of Cartago, Costa Rica

30 Aug.

SFB & I went to this area (see map & here)



NOT
TO
SCALE

we hunted on both
sides of rd. - esp. A & B.

R.M. Zink
1982

Journal

vicinity of Cartago, Costa Rica

30 Aug.
(cont.)

George & I set out from San Jose towards a site S of the city of Cartago called "El Radio" or just "Radio" on the map. We were trying to collect Engidonax albicularis in what Stiles describes (pers notes) as tall grass with scattered shrubs + trees. The morning was cold, windy, & wet. There are lots of Volatinia + Z. capensis. GFB thought (95%) he saw 2 Engidonax but I ~~only~~ saw none.

We returned to San Jose & spent rest of day turning vehicle into OTS, getting export permit + seeing Gary Stiles [Stiles did not think the song or behavior of E. albicularis resembles the E. albonotata complex. He thought the bird was fairly unique or Engidonax flycatchers go]. The export permit turned out to be a hassle extraordinary. It wasn't ready until 2:45 p.m. or then I had to go to Banco Central - which, of course, closes at 3. No one in the bank knew where I went to get the "licencia para exportacion", so I returned (across street) to the Direccion Forestal. They also DID NOT know where in the Banco Central it was supposed to go! They called & said it was on the 2nd floor, so, once again, manana.

R. M. Zink

1982

Journal

San Jose, Costa Rica

31 Aug.

We spent am. getting export permit + doing last minute shuffling for the exchange rate here is in our favor (coffee 2.254/lb. [34 colons/kilo]).

Departed for Miami in afternoon.



